Models of Integrated Patient Care Through OTPs and DATA 2000 Practices

Essential Elements of Vermont's "Hub and Spoke" Health Homes Model

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Integration of Health Homes in Rhode Island OTPs

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Integration of Health Homes in Maryland OTPs

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Introduction

This is the first of three policy papers in a series that the American Association for the Treatment of Opioid Dependence (AATOD) has developed for the Substance Abuse and Mental Health Services Administration (SAMHSA) in the U.S. Department of Health and Human Services (HHS). The papers provide a blueprint for more innovative and integrated service delivery, focusing on opioid treatment programs (OTPs) as comprehensive treatment hubs in the treatment of opioid addiction.

In 2010, the Affordable Care Act established the Medicaid health home option, which enabled states to reimburse agencies for providing care coordination and health promotion services. This paper describes how three states—Vermont, Rhode Island, and Maryland—have implemented OTP health homes.

Essential Elements of Vermont's "Hub and Spoke" Health Homes Model

In the first section of this paper, Dr. Karen Casper and Anthony Folland, of the Vermont Department of Health's Division of Alcohol and Drug Abuse Programs, describe the essential elements of Vermont's Hub and Spoke health home model. This model provides an elegant method of integrating previously isolated service delivery systems. As the authors point out, the Hub and Spoke model established:

... a comprehensive, regional system of treatment for opioid addiction in Vermont by building on the infrastructure of existing provider configurations—namely, (1) the specialty OTPs established initially to provide highly regulated methadone treatment, (2) the authorized physicians prescribing buprenorphine in OBOT settings, and (3) Vermont's patient-centered medical homes (PCMHs) supported by community health teams (CHTs)—that is grounded in Vermont's Blueprint for Health framework for health reform and the health home concept in the federal Affordable Care Act.

Drs. Casper and Folland describe integrated care in the Vermont model this way:

The Hub and Spoke model is characterized by a limited number of specialized, regional addictions treatment centers working in meaningful clinical collaboration with general medical practices. Specializing in the treatment of complex addiction, the regional centers (Hubs) provide intensive treatment to patients and consultation support to medical providers (Spokes) treating patients in the general practice community. This framework efficiently deploys addictions expertise and helps expand access to care for Vermonters.

What is implicit in the success of the Hub and Spoke model is political and administrative support from the top down—including support from the governor and the state agency for alcohol and drug use disorders, collaboration among different service providers, and legislative

support for payment reform for shared contributions by all payers—as well as a realistic reimbursement model to support service integration.

The Vermont model is clearly designed to break down the silo effect among OTPs, Drug Addiction Treatment Act of 2000 (DATA 2000) practices, and other systems of behavioral and primary care. The models implemented in Rhode Island and Maryland are designed to do so as well.

Integration of Health Homes with OTP Services in Rhode Island

In the second section of this paper, Dr. Susan Storti describes the integration of health homes with OTPs in the state of Rhode Island. Dr. Storti underscores the need for collaboration, trust, and a mutual understanding of the desire to provide integrated service to patients who are opioid addicted:

One such opportunity afforded under the Affordable Care Act is for states to receive funding for "Coordinated Care through a health home for Individuals with Chronic Conditions," also referred to as health home services. This provision presents an opportunity to build a patient-centered system of care that provides health care for beneficiaries of the state Medicaid program. Its service delivery approach facilitates access to an interdisciplinary array of medical care, behavioral health care, and community based social services and supports for both children and adults with chronic conditions.

Health Home Integration in Maryland

In the third and final section of this paper, Vickie Walters and Angela Fulmer describe Maryland's successfully integrated model of health homes with OTPs. They make an important point, which reflects the experiences in Vermont and Rhode Island:

Many OTPs have embraced holistic models of care to coordinate across disparate health and social service systems to improve the factors, also known as social determinants, that impact a patient's overall health and treatment outcomes, which include access to medical care, safe neighborhoods, education, housing, and vocational opportunities.

This section also focuses on the need for collaboration, in addition to the appropriate administrative and reimbursement support, to create ongoing success for such service integration.

The Service Integration Challenge

All three sections of this paper focus on the need to increase access to care and stress the importance of coordinated and integrated care. OTPs and DATA 2000 practices can effectively collaborate when the OTPs serve as hubs of this care and the DATA 2000 practices serve as "spokes," connected to the OTPs as health service delivery models. Patients can be referred between the two entities in a long-term collaborative model which benefits the patients.

The three policy papers in this series describe the tremendous opportunity for expanding coordinated, integrated care and the roles OTPs can play in this effort. The papers present models for providing the care and ways to address the systemic challenges to service integration with drug courts, correctional facilities, probation and parole offices, and family courts with Child Protective Services.

Comprehensive service integration will require broad-based administrative support from the federal government—with collaborative work among the White House Office of National Drug Control Policy, the Department of Justice, and HHS—as well as funding and other support from states and counties with jurisdictional authority over these various systems. It will also require broad-based and long-term educational support to break down the myths about why medications are used to treat opioid addiction and to promote understanding of the long-term value of having patients utilize the federally approved medications to treat opioid addiction. It will take work to achieve comprehensive service integration, but the benefits it promises to patients and society make it well worth the effort.

Essential Elements of Vermont's "Hub and Spoke" Health Homes Model Karen Casper, Ph.D. and Anthony Folland Vermont State Opioid Treatment Authority

Introduction

The use of heroin and the misuse of other opioids (e.g., prescription pain relievers) have been identified as major public health challenges in Vermont, with far reaching health, social, and economic consequences. Medication-assisted treatment (MAT), the use of medications in combination with counseling and behavioral therapies¹ to provide a whole-patient approach to the treatment, has long been recognized as a highly effective treatment approach to opioid addiction. The medications suppress the craving for opioids and thus work better to reduce relapse than other approaches (e.g., relying on detoxification followed by abstinence-oriented treatment).

MAT is considered a long-term treatment for opioid dependence, diagnosed as a chronic, relapsing illness. This means that individuals may remain on medications indefinitely, allowing them to lead normal lives, akin to insulin used among people with diabetes.² The two primary medications used in conjunction with counseling and support services to treat opioid dependence in Vermont are methadone and buprenorphine, although naltrexone is also being used in some instances. Effective MAT programs also provide services such as mental and physical health care, case management, life skills training, employment, and self-help. The length of the course of treatment is individually determined according to patient need and criteria. MAT services are cost effective over time because they help stabilize patients' health, increase their rate of employment, and decrease their involvement in the criminal justice system.

By combining high cost structure with high cost medication, Vermont's "Hub and Spoke" health home initiative to provide MAT for individuals with opioid addictions aims, paradoxically, to achieve improved patient care at reduced costs for the state's health system. The success of the strategy relies on three key elements: (1) the significant expansion of the use of buprenorphine in both "Hubs" and "Spokes"; (2) a system sufficiently fluid to allow patient transfers to and from opioid treatment programs (OTPs) and office-based opioid treatment (OBOT) programs, as clinically indicated; and (3) creative health home payment methodologies to support "enhancements" to hold the Hub and Spoke system together.

While growing demand resulting from the opioid crisis still outweighs system expansions, early results show increased access to care, improved quality of care, and first-layer indications of

¹ As defined by the Substance Abuse and Mental Health Services Administration, http://www.samhsa.gov/medication-assisted-treatment

² Vermont Health Homes for Opioid Addiction; Hub & Spoke, Program Overview, April, 2014, p. 1. http://www2.leg.state.vt.us/CommitteeDocs/2014/Senate%20Health%20and%20Welfare/Substance%20Abuse%2 OTreatment/W~Beth%20Tanzman~Vermont%20Health%20Homes%20for%20Opioid%20Addiction%C2%A6%20Hub%20and%20Spoke~4-23-2014.pdf

greater cost effectiveness. Additional cost efficiencies are likely to be realized as the system continues to reduce other unnecessary and even higher-cost health care expenditures, including medically unnecessary emergency room and hospital visits, as well as social consequences and legal costs often associated with opioid addiction.

Opioid Treatment Programs, Precursors to Hubs

In Vermont, as in many states, the federal regulations governing the use of the MAT medications have resulted in distinct provider types. Methadone treatment for opioid addiction is highly regulated and can only be provided through specialty OTPs. OTPs must adhere to specific requirements for providing comprehensive methadone treatment services as promulgated by the Substance Abuse and Mental Health Services Administration (SAMHSA). Medications must be dispensed and accounted for in a highly controlled manner. Any decreases in treatment structure are to be determined by factors including behavioral stability, treatment engagement/compliance and response, and required time in treatment. The storage, security, safe handling, and record keeping requirements are all highly regulated and reviewed by the Drug Enforcement Administration (DEA) to ensure compliance with its requirements.

Prior to October 2002, outpatient MAT was not available in Vermont, and therefore individuals requiring methadone maintenance treatment were treated out of state. Vermont opened its first specialty OTP in 2002 with limited state funding to support 100 patient slots for MAT administering methadone treatment.

Office-Based Opioid Treatment Programs, Precursors to Spokes

In 2000, the Drug Addiction Treatment Act of 2000 (DATA 2000), under section 3502 of the Children's Health Act of 2000 (HR 4365), significantly changed medical treatment for opioid addiction by allowing physicians to prescribe buprenorphine for MAT in a general medical office (OBOT). Prior to that, MAT could only be provided in the specialty OTPs.

Buprenorphine was approved for OBOT use in Vermont in 2003, with promulgation of state regulatory guidelines to assist providers in the care of opioid dependent patients. For a rural, decentralized state, with only a handful of OTPs (given their high cost and complex regulatory constraints), buprenorphine provided a suitable supplement for addressing the growing demands and gaps for opioid treatment services.

In 2009, following positive research results on OBOT outcomes emerging out of the University of Vermont, the Vermont Department of Health's Division of Alcohol and Drug Abuse Programs (ADAP) began supporting training for physicians and district health offices on obtaining DATA 2000 waivers,³ as well as supporting the use of Medicaid dollars to cover costs of buprenorphine treatment for qualifying individuals. Furthermore, growing waitlists for treatment at OTPs continued to drive expansion of OBOT with physicians prescribing buprenorphine. It was not

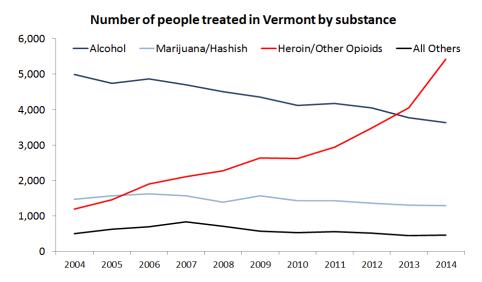
³ A physician must complete a required 8-hour online course, obtain an X-DEA license by demonstrating qualifications as defined in the DATA 2000 (Public Law 106-310, Title XXXV, Sections 3501 and 3502), and obtain a waiver from SAMHSA in order to provide MAT for opioid addiction in an OBOT. DATA 2000 enables office-based physicians to treat patients for opioid addiction with Schedules III, IV and V narcotic controlled substances specifically approved by the Food and Drug Administration for addiction treatment.

long before OBOT quickly surpassed methadone clinics, with patients receiving buprenorphine from various kinds of physicians in psychiatry, family practice, internal medicine, obstetrics and gynecology, pediatrics, orthopedics, and pain management.

Defining the Problem

Despite growing numbers of OTPs and OBOT programs (OBOTs), demands for opioid treatment continued to exceed services, with associated health, economic, social, and legal impacts for individuals, families, and the state threatening to skyrocket. Opioids are a highly addictive class of drugs that include pain relievers such as oxycodone, codeine, fentanyl, and morphine, and street drugs such as heroin, as well as methadone used to treat opioid addiction. The number of individuals identified at treatment admission using heroin/other opioids as well as other opioid/synthetics (e.g., prescription pain relievers) is higher than all other substances. Furthermore, the number of Vermonters treated for heroin addiction increased 365 percent between 2010 and 2014, showing an exponential growth pattern for heroin/other substances. See the Figure 1 below.

Figure 1.



Source: Alcohol and Drug Abuse Treatment Programs

According to the Treatment Episode Data Set (TEDS), over the past 2 years admissions for heroin have increased 242 percent, while those for other opioids have increased only 15 percent. See Table 1 below.

⁴ These increases are driven in part by increased funding and capacity for MAT.

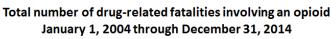
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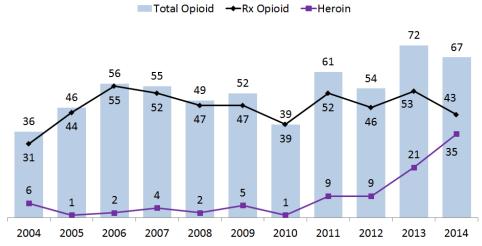
Table 1. Vermont Treatment Admissions by Substance – Source: TEDS

Measure	1992	2011	2013	Change (%) 1992 to 2013	Change (%) 2011 to 2013
Total admissions	5485	8200	9710	77%	18%
Alcohol only	2951	2009	2022	-31%	1%
Alcohol with drug	1805	1601	1404	-22%	-12%
Heroin	37	636	2178	5,786%	242%
Other opioids	22	2240	2574	11,600%	15%
Marijuana	368	1179	1089	196%	-8%

Deadly heroin overdoses have been rising significantly in Vermont over the past 5 years.⁵ Fortunately, fatalities involving prescription opioids that did not include heroin have remained relatively stable, but are still too high. See Figure 2 below.

Figure 2.





Source: Vermont Office of the Chief Medical Examiner

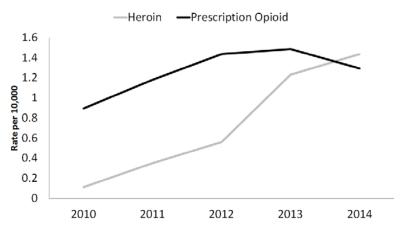
There has also been a sharp increase in heroin-related visits to emergency departments in the past 3 years. Perhaps as a result of recent improvements in the Vermont Prescription Monitoring System (VPMS), physician education, and regulatory changes requiring VPMS use prescription

⁵ To save lives, the Vermont Department of Health, through community-based partners, is distributing overdose rescue kits with nasal naloxone (Narcan®), a medication that can reverse an opioid overdose. Each overdose rescue kit contains two doses of naloxone. For more information, see http://healthvermont.gov/adap/dashboard/opioids.aspx

drug-related visits have shown some leveling and a possible decline in trend since 2012. See Figure 3 below.

Figure 3.

VT Emergency Department Early Aberration Reporting System Opioid Overdose rate per 10,000 People by Type of Opioid 2010-2014.

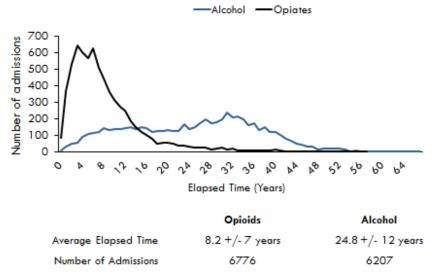


Source: Vermont Early Aberration Reporting System

Finally, the difference between the age of first use and the age at which a person seeks treatment is much shorter for opiates (8 years, plus or minus 7 years) than for alcohol (nearly 25 years, plus or minus 12 years). In other words, the relative impact of opioid use on individuals is very harsh, and consequently people who use opiates end up in the treatment system much sooner than those using alcohol. This alone is one key reason the system has so quickly experienced strains with opioids surpassing other substances being misused. See Figure 4 below.

Figure 4.

Elapsed Time (Years) Between Age of First Use and Age at Treatment Admission for Daily Users of Opioid and Alcohol



Source: Alcohol and Drug Abuse Treatment Programs, admissions data 2005-2011

In order to address the growing opioid crisis, therefore, Vermont needed to find a sufficiently robust and efficacious approach that would (1) significantly increase access to care; (2) improve quality of care particularly for the high risk, complex population generally of focus; and (3) achieve greater cost effectiveness.

Solution

In 2013, the Care Alliance for Opioid Addiction was formalized in response to a 2013 legislative mandate to "strengthen Vermont's response to opioid addiction." The vision of the Care Alliance is to expand Vermont's health home initiative to enhance the provision of MAT for the treatment of opioid addictions within a broader framework of integrated, managed care through a health home approach. The Care Alliance is a joint initiative of the Vermont Blueprint for Health, the Clinical Operations unit of the Department of Vermont Health Access (DVHA), and ADAP, and works in collaboration with local health, addictions, and mental health providers.

The solution pursued was to establish a comprehensive, regional system of treatment for opioid addiction in Vermont by building on the infrastructure of existing provider configurations—namely, (1) the specialty OTPs established initially to provide highly regulated methadone treatment, (2) the authorized physicians prescribing buprenorphine in OBOT settings, and (3) Vermont's patient-centered medical homes (PCMHs) supported by community health teams (CHTs)—that is grounded in Vermont's Blueprint for Health framework for health reform and

⁶ Vermont Act 75, an act relating to strengthening Vermont's response to opioid addiction.

⁷ The Blueprint for Health (Blueprint) is Vermont's state-led, nationally recognized initiative transforming the way primary care and comprehensive health services are delivered and paid for. Originally established through Vermont statute in 2006, the Blueprint was codified in 2010 with Act 128 (amending 18 V.S. A. Chapter 13) defining it as a "program for integrating a system of health care for patients, improving the health of the overall population, and improving control over health care costs by promoting heath maintenance, prevention, and care

the health home concept in the federal Affordable Care Act. New creative payment methodologies were also built on the existing infrastructure of their service provider configurations. At the center of the Care Alliance approach is the implementation of what has become known as the Vermont's Hub and Spoke health home model to ensure that each person's care is effective, coordinated and supported.

The Hub and Spoke Health Home Model

The Hub and Spoke model is characterized by a limited number of specialized, regional addictions treatment centers working in meaningful clinical collaboration with general medical practices. Specializing in the treatment of complex addiction, the regional centers (Hubs) provide intensive treatment to patients and consultation support to medical providers (Spokes) treating patients in the general practice community. This framework efficiently deploys addictions expertise and helps expand access to care for Vermonters.

In the Hub and Spoke health home approach, each patient undergoing MAT has an established physician-led medical home, a single MAT prescriber, a pharmacy home, access to existing Blueprint CHTs, and access to Hub or Spoke nurses and clinicians as needed. Depending on initial determination of complexity and appropriate treatment method, patients are referred to either a Hub or a Spoke for assessment and development of an integrated plan of care. Enhanced self-management and informed decision making are firmly embedded in multiple forms in the Hub and Spoke model. All individuals receiving MAT services have access to a peer recovery network with recovery support services, including coaching and self-help support, provided through one of 12 regional Recovery Centers. Health home team members maintain awareness of and engage the local recovery and self-help community to assist with providing self-help and family support services to individuals receiving MAT services.

The Hub and Spoke model has been developed with elements added as needed, building around key regional centers to serve substance misusing populations with histories of multiple complex issues that require a system-coordinated response to achieve positive outcomes. New clinical staff are added to both the Hubs and the Spokes to ensure provision of the six health home services.

Hubs

A Hub is a specialty treatment center responsible for coordinating the care of individuals with complex opioid addictions and co-occurring opioid substance misuse and mental health conditions across the health and substance use disorder (SUD) treatment systems of care. Hubs provide comprehensive assessments and treatment protocols. All methadone treatment is provided in Hubs. For a subset of buprenorphine patients with clinically complex needs, Hubs may serve as the MAT induction point and provide care during initial stabilization. Hubs

coordination and management." Subsequently, the Blueprint set out a system under the Vermont Chronic Care Initiative whereby the highest-risk and highest-cost Medicaid beneficiaries are referred for care management. The Blueprint operates under the Department of Vermont Health Access, the publically funded state health insurance program. "Substance abuse," including opioid addiction, was defined as a chronic condition, and brought under the Blueprint's Chronic Care Initiative, allowing for more creative funding to test various treatment system modalities.

coordinate referrals and provide support for ongoing care and prevention and treatment of relapse, and they provide specialty addictions consultation. Hubs also may provide support for tapering off MAT.

Hubs are expected to maintain continuous and long-term relationships with selected clients. They also must proactively assure that clients leaving their services have clinically appropriate referrals (e.g., to other Hubs, MAT prescribers, health care, housing, recovery and human services), that such referrals are completed to the extent that there are entities to accept such referrals, and that clients are not lost to contact.

In addition to comprehensive MAT addictions treatment, Hubs provide clinically appropriate services in support of the SUD treatment plan, health home services, and rehabilitation services. The model client may have both substance dependence and co-occurring mental health conditions; therefore, Hub services need to be capable of treating co-occurring addictions and mental health conditions in an integrated manner. In addition, the clients served in Hubs are expected to need a broad spectrum of health, social welfare, housing, and recovery services, requiring that Hubs be capable of systematic and close coordination of care across a number of health and human services providers. Thus, proposed Hub providers must demonstrate the capacity to either provide directly or to organize comprehensive care.

Hubs are certified as OTPs, and they must meet specific federal and state requirements in order to receive approval to operate. In addition to meeting DEA and SAMHSA requirements, they must also be approved by the Vermont State Opioid Treatment Authority (SOTA) or ADAP and accredited by a national accreditation body such as the Joint Commission on Accreditation of Healthcare Organizations, the Commission on Accreditation of Rehabilitation Facilities (CARF), or the Council on Accreditation. Treatment requirements are prescribed by federal regulations, 42 CFR Sec. 8.3, as well as the Vermont Department of Health's Medication Assisted Therapy for Opioid Dependence Rules.

As specialized regional centers, Hubs (or Regional Comprehensive Addictions Treatment Centers) serve a defined geographic area to provide comprehensive addictions and co-occurring mental health treatment services to Vermonters with opioid dependence, including comprehensive assessment, care coordination, and MAT for clients. They must assure the provision of integrated health care, recovery supports, and rehabilitation services for their clients. Hubs also now support and provide consultation to primary care providers and physician teams providing buprenorphine treatment (the Spokes). These consultation services include:

- Consultation services, for example: psychiatry, addictions medicine, expertise in management co-occurring mental health conditions, and recovery supports.
- Comprehensive assessments and treatment recommendations, such as differential diagnosis, assessment of need for MAT versus other services, use of methadone or buprenorphine.
- Induction and stabilization services for initiation of buprenorphine, especially for complex clinical presentations.

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⁸ Previously existing OTPs were qualified as Hubs. All new Hubs would follow this revised approach.

- Reassessment and treatment recommendations for individuals experiencing substance use relapse.
- Support for tapering off maintenance medication, including the referral for more intensive psychosocial supports.
- Support and consultation for recovery and rehabilitation services and assistance, with regard to the substance misuse treatment needs, in designing individualized recovery plans and coordination with human services, housing, employment, and other specialized services and supports.

Spokes

A "Spoke," or "designated provider," is the ongoing care system composed of a prescribing physician (prescribing buprenorphine) and collaborating health and addictions professionals who monitor adherence to treatment, coordinate access to recovery supports, and provide appropriate supportive counseling, contingency management, and case management services in support of MAT. Spokes are considered OBOTs. They also must meet state and federal requirements to provide medication-assisted therapy for opioid treatment in order to prescribe buprenorphine to patients, but these are not as complex. Spokes must have an appropriately credentialed physician and can be:

- Blueprint Advanced Practice Medical Homes.
- Outpatient SUD treatment providers.
- Primary care providers.
- Federally Qualified Health Centers.
- Independent psychiatrists.

The enhanced staffing model for Spokes requires one full-time employee nurse and one full-time licensed clinician case manager for every 100 MAT patients. These staff are hired or contracted by the Blueprint and are functionally and administratively part of the local CHT, and they are deployed directly into the OBOT physician practices (i.e., Spokes) to provide the six health home services (see below). As most OBOTs prescribe to fewer than 100 buprenorphine patients, these staff are shared across multiple practices in the same way other CHT staff are shared among participating PCMHs.

Hub (and Spoke) services are not necessarily time limited; they are designed to provide continuity of services over time to selected clients, similar to patient-centered medical homes. Designated providers within the Hub and Spoke system replace episodic care based exclusively on addictions illness with coordinated care for all acute, chronic, and preventative conditions in collaboration with primary care providers. Programming reflects the chronic and relapsing nature of addictions and is able to engage and re-engage clients in services.

Health Home Services

The Hub and Spoke program, as part of the Medicaid State Plan Amendment, now offers the six health home services authorized by the Affordable Care:

• <u>Comprehensive Care Management</u>: The activities undertaken to identify patients for MAT, conduct initial assessments, and formulate individual plans of care. In addition,

care management includes the activities related to managing and improving the care of the patient population across health, SUD and mental health treatment, and social service providers.

- <u>Care Coordination</u>: The implementation of individual plans of care (with active patient involvement) through appropriate linkages, referrals, and coordination and follow-up as needed with services and supports across treatment and human services settings and providers. The goal is to assure that all services are coordinated across provider settings, which may include medical, social, Department of Children and Families, mental health and substance use, corrections, educational, and vocational services.
- <u>Health Promotion</u>: The activities that promote patient activation and empowerment for shared decision making in treatment, support healthy behaviors, and support selfmanagement of health, mental health, and substance abuse conditions. There is a strong emphasis on person-centered empowerment to promote self-management of chronic conditions.
- <u>Comprehensive Transitional Care</u>: Care coordination services focused on streamlining the movement of patients from one treatment setting to another, between levels of care, and between health and specialty mental health and SUD service providers. The goal is to reduce hospital readmissions and facilitate the timely development of referrals and transitions to other services.
- <u>Individual and Family Support Services</u>: A flexible, intensive-to-moderate service and support package that increases family capacity, wellness, and functioning. This initiative combines current programming and funding for more intensive services and supports into one program that provides early intervention in an effort to build skills and maximize families' strengths, keep families together, and reduce use of out-of-home placements, regardless of disability type.
- Referral to Community and Social Support Services: Assistance for clients to obtain and maintain eligibility for formal supports and entitlements (e.g., health care, income support, housing, legal services) and to participate in informal resources to promote community participation and well-being.

An Integrated Health System for Addictions Treatment

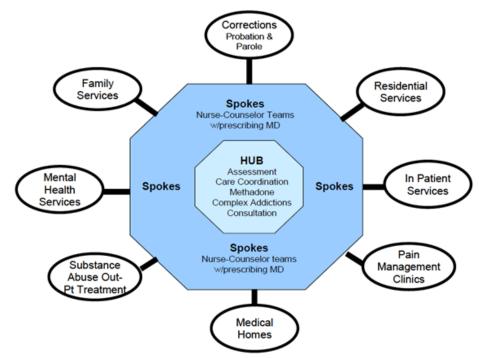
Vermont's expanded health home initiative, achieved through the Care Alliance's Hub and Spoke model, reflects a comprehensive, integrated regional health system for opioid addictions treatment that is further integrated into the state's larger Integrated Health System for Addictions Treatment. This larger system represents a multifaceted approach to addressing opioid addiction that involves multiple community partners. Programs and services include regional prevention efforts, ⁹ including opioid-specific prevention initiatives; drug take-back programs; intervention services through the monitoring of opioid prescriptions with the VPMS; recovery services at

⁹ The best prevention is evidence based and comprehensive, with interventions at the state, community, school, family, and individual levels. The same dimensions of wellness and community environments that help to prevent substance use disorders also support recovery. Investing in prevention as early as possible can prevent and reduce the tremendous suffering that addiction causes for individuals, families, and communities. For every dollar

eleven Recovery Centers; overdose death prevention through the distribution of naloxone rescue kits; and a full array of treatment modalities of varying intensities. All SUDs are addressed in this larger integrated system, and it encompasses the other treatment service modalities (e.g., outpatient and intensive outpatient services, residential services, mental health services) and other systems and institutional intersections, including corrections, family services, and pain management. See Figure 5 below.

Figure 5.

Integrated Health System for Addictions Treatment



The effectiveness of Vermont's Integrated Health System for Opioid Addictions Treatment depends heavily on the ability of patients, families, communities, providers, and the state to intervene early—before higher levels of care such as inpatient detoxification, residential, and long-term MAT are needed—in order to avoid negative consequences that can accrue individually as well as the societal costs associated with long-term opioid addiction.

Solution Details

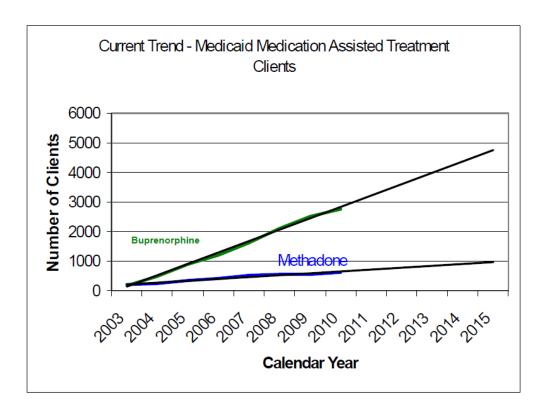
The success of Vermont's Hub and Spoke health home solution relies on three key factors.

1. The significant expansion and use of buprenorphine in the OTPs (Hubs)

Previously, OTPs were exclusively specialty *methadone* treatment clinics. Now, OTPs as Hubs are also authorized to prescribe buprenorphine as are OBOTs (as well as naltrexone). This has significantly expanded the use of buprenorphine (as shown in the figure below), and indeed no other state uses buprenorphine more than Vermont.¹⁰ However, buprenorphine is far more expensive than methadone. This means that Vermont has combined a high cost structure with high cost medication, with the paradoxical aim of achieving improved patient care at reduced costs for the state's health system.

Figure 6.

¹⁰ The State Opioid Treatment Authority and Manager of Clinical Services, Anthony Folland, Vermont Department of Health, Division of Alcohol And Drug Abuse Programs.



As shown in Figure 6, above, the number of MAT patients receiving buprenorphine in a Hub or as prescribed by a physician in a medical office has far exceeded the number of MAT patients receiving methadone, the highly regulated treatment provided in specialty clinics.

By expanding the use of buprenorphine in the Hubs, the Hub physician can for the first time determine dosing structure separate from the choice of medication, instead of automatically having to place the patient on methadone. 11 Patients treated in Hubs with buprenorphine who are

¹¹ Hub buprenorphine details:

Buprenorphine could now be prescribed just like methadone within the Hubs

More flexibility with take-homes

[•] Offered every-other-day or every-third-day dosing

Introduced the use of Med-O-Wheels for securing take-homes of buprenorphine tablets

[•] Required all patients to FULLY DISSOLVE and ABSORB sublingually both forms of buprenorphine—films and tablets—in a 5-minute observation period

Prior authorization process put in place by Medicaid for mono-buprenorphine and all doses over 16 mg

Required checking of VT Prescription Monitoring System (VPMS) at intake (to eliminate the risk of OBOT treatment overlaps)

[•] Recommended checking VPMS every 3 months and for cause (presence of unexpected drug screen result or absence of substance prescribed or not

[•] Essential Hub services: Intake/ physical exams; screening for sexually-transmitted diseases, tuberculosis, human immunodeficiency virus (HIV), and hepatitis A,B,C, and education and referral; onsite urine screening and breathalyzer; medical and psychological evaluation and screening; pregnancy screening and birth control information; vaccines for hepatitis A/B, tetanus—diphtheria—pertussis(TDAP), Pneumovax®, influenza; daily medication dosing and management and tapers; drug and alcohol counseling (group and individual); case management services; orientation to treatment and recovery; gender-specific issues of misuse, supportive

sufficiently stabilized now have the opportunity to be transferred as patients to OBOTs (now Spokes) for continued buprenorphine treatment, as clinically indicated, by a qualified physician in their local community. The hope is that patient outcomes will further improve as they move out to Spokes into office-based care, while reducing the high costs associated with Hub treatment over time. Additional cost savings are also expected to be realized from reduction in other unnecessary and even higher-cost health care expenditures (e.g., medically unnecessary emergency room visits and hospital visits), as well as social and legal costs associated with opioid addictions, simply by virtue of having a system alternative to absorb these individuals.

At present, approximately one-third of all patients on a statewide basis move out of Hubs after stabilization with buprenorphine into Spoke (office-based) care, representing both wide scale and a frequency of transfers previously unseen in Vermont.

2. Ensuring the fluidity of transfer between Hubs and Spokes via referrals

While this factor may be ancillary to the primary factor of success above, the challenge to the Care Alliance of establishing a smooth, efficient, and reliable means of transferring patients between care modalities across the Hub and Spoke health home system cannot be overstated. First, this involved developing a "referral culture" to replace the "capacity culture" based on a fee-for-services billing model. This was facilitated in a number of ways, including establishing discharge planning and referral as a core service; reimbursement criteria that included one "health home" encounter with referrals alongside one standard clinical practice and that provided incentive rates for the provision of "enhanced services," including the six health home services as well as establishing and maintaining linkages between Spokes and Hubs; and being involved in a "learning collaborative" to together address some of the emerging challenges.

Second, Vermont also developed and employs a treatment need questionnaire (TNQ)¹² that scores patients on criteria selected to predict outcomes and the likelihood a patient would be an excellent candidate for a particular level of opioid treatment, e.g., Spoke treatment—a more tightly structured and supervised dosing in a Spoke or possibly a Hub setting—or Hub treatment. This tool helps facilitate a more direct placement of patients into the most appropriate level of care. ¹³

Lastly, the optimum model is for a clinically qualifying Hub patient to stabilize on buprenorphine products within the Hub and, as appropriate, be transferred to the less medication-controlled Spoke environment in an office-based physician practice. Should the patient destabilize, the patient may be referred back to the Hub for restabilization. This requires a

services, pregnancy, parenthood; discharge planning and referral; and care coordination and consultation with primary and specialty and hospital services

Developed by Vermont physician John Brooklyn, M.D., and Stacey C. Sigmon, Ph.D., of Vermont's Center on Behavior and Health, the tool was based on the Addiction Severity Index topics—including legal status, employment, social issues, psychological, medical and drug use histories—and comprises a 21-item checklist which scores up to 26. Lower scores predict good Spoke outcomes and likelihood that the patient would be an excellent candidate for OBOT; medium scores indicate a more tightly structured and supervised dosing in an OBOT or possibly a Hub; and scores 16–26 indicate the need for Hub treatment.

¹³ All patients at intake also receive a biopsychosocial assessment as well as a complete a Self-Sufficiency Matrix to further rate a patient's status to determine the most appropriate level and types of care needed.

sophisticated referral process and protocols for bidirectional movement between the Hubs and Spokes. With the launch of the first regional learning collaborative, the main objective was to operationalize the Hub to Spoke transfer process within Blueprint's hospital service area (HSA). 14

3. Adopting a creative payment methodology that allows the use of health home moneys to expand capacity within Hubs to support service enhancements while building staffing infrastructure within the Spokes

The Hub service enhancements augment programming to include health home services to link with the primary care and community services, provide buprenorphine for clinically complex patients, and provide consultation support to primary care and specialists prescribing buprenorphine. The methodology also supports corresponding Spoke infrastructure that embeds new clinical staff (a nurse and a Master's-prepared, licensed clinician) in physician practices that prescribe buprenorphine (Spokes) through the Blueprint CHTs to provide health home services, including clinical and care coordination supports to individuals receiving buprenorphine. To date, approximately 40 full-time nurses and addictions counselors have been hired and deployed in over 60 different practices. 15

Payment Methodology

Vermont's managed care model is designed to provide significant flexibility with regard to the financing and delivery of health care to promote better access, improve quality, and control program costs. The majority of Vermont's Medicaid program operates under the Global Commitment to Health Demonstration Waiver which is administered under this flexible managed care model. Creative new uses of Vermont's Medicaid resources include new payment mechanisms (e.g., case rates, capitation, combined funding streams, capacity-based payments) rather than fee-for-service, the ability to pay for services not traditionally reimbursable through Medicaid (e.g., pediatric psychiatric consultation), and investments in programmatic innovations for Medicaid beneficiaries (e.g., the Vermont Blueprint for Health).

Under the terms of the Affordable Care Act Section 2703 State Plan Amendment, Vermont will collect 90–10 matching funds only for the Hub and Spoke costs directly linked to providing the health home services. The remaining services are matched at the current state match rate. As stated previously, payment methodologies have been built on the existing infrastructure of their service provider configurations, so that there is one methodology and payment stream for Hubs and one methodology and payment stream for Spokes.

Hub Health Home Staffing and Cost Model

The methodology to develop costs for the Hub health home enhancements is based on the costs to employ key health professionals (salary and fringe benefits) who provide the health home services. The staffing enhancements for health homes were developed in collaboration with current methadone providers (traditional OTP) and are based on a model of 400 MAT patients

¹⁴ For the learning collaboratives, each entity had specifics measures to report on at each session to measure progress toward goals such as waiting list reductions, retention in treatment, responses to drug using behaviors, psychological assessments, reducing diversion, assessing dose adequacy, and care coordination.

15 http://legislature.vermont.gov/assets/Legislative-Reports/Opioid-system-effectiveness-1.14.15.pdf, p.7.

served at a regional treatment center. The resulting health home enhanced staffing model represents, on average, a 43-percent increase from Vermont's current statewide average rate for methadone treatment as usual.

Hub Health Home Payments

The Hub payment is a monthly, bundled rate per patient. The Hub provider initiates a claim for the monthly rate, using the existing procedure code for current addictions treatment and a modifier for the health home services. The provider may make a monthly claim using the modifier on behalf of a patient for whom the provider can document the following two services in that month:

- One face-to-face typical treatment service encounter (e.g., nursing or physician assessment, individual or group counseling, observed dosing), and
- One health home service (comprehensive care management, care coordination, health promotion, transitions of care, individual and family support, referral to community services).

If the provider did not provide a health home service in the month, then the provider may only bill the existing procedure code without the health home modifier at a lower rate.

Under the terms of the Affordable Care Act Section 2703 State Plan Amendment, Vermont will seek 90–10 matching funds for only the health home enhancements, or 30 percent of the total Hub costs per Medicaid patient.

Spoke Health Home Staffing and Cost Model

Payment for Spoke health home services will be based on the costs to deploy one full-time registered nurse and one full-time, licensed clinician case manager for every 100 patients across multiple providers within an HSA. Embedding the staff directly in the prescribing practices allows for more direct access to mental health and addiction services, promotes continuity of care, and supports the provision of multidisciplinary team care. As with the Blueprint CHTs, Spoke staff (nurse and clinician case manager) are provided free of cost to patients receiving MAT, essentially as a "utility" to the practices and patients.

Spoke Health Home Payments

Spoke payments are based on the average monthly number of unique patients in each HSA for whom Medicaid paid a buprenorphine pharmacy claim during the most recent 3-month period, in increments of 25 patients. Building on the existing CHT infrastructure, new Spoke staff are supported through Capacity Payments. For administrative efficiency, Spoke payments will be made to the lead administrative agent in each Blueprint HSA as part of the existing Medicaid CHT payment. Buprenorphine pharmacy claims are not affected, and Spoke physicians will continue to bill fee-for-service for all typical treatment services currently reimbursed by the DVHA.

Third Party Payers

While the majority of MAT is funded by the state through Medicaid payments, CHT staff, and financial support for uninsured patients in Hubs, some patients have third party insurance

through Blue Cross Blue Shield, MVP, Cigna, and TRICARE. Medicare does not pay for MAT provided by specialty treatment providers such as the Hubs, but it will pay for services provided in physician's offices (Spokes). Insurers have consistently paid for direct medical care through the Spokes as well as for buprenorphine dispensed in pharmacies. Third party payers also contribute funds for the Blueprint CHTs, but third party payment methodologies did not originally fully support the Care Alliance Hub level of care. Hub providers have made significant progress in negotiating payments for the full range of Hub services for patients with private insurance.

Results

The Care Alliance has been fully implemented only recently. The Blueprint for Health, along with the Vermont Department of Health, is in the process of designing an evaluation for the Care Alliance system to assess empirically the impact of MAT in Vermont. The primary source of data for this study will be the Vermont All-Payer Claims Database known as the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES). At this time, the evaluation is expected to include a review of the impact of MAT on health care utilization patterns and overall patient cost. Because outcomes for this population transcend the medical system, this evaluation will also investigate the relationship between MAT and incarceration. It is anticipated that the evaluation report will be available in early 2016. In the meantime, the best available data are provided below.

From the start, the critical criteria for determining whether Vermont's Hub and Spoke health home initiative through the Care Alliance was a sufficiently robust and efficacious approach to address the growing opioid addictions crisis were considered to be the following:

1. The system design needed to significantly increase access to care.

Vermont now has five Hubs, with eight sites, for treating people with opioid addiction in each region of the state. Spokes have increased to over 150 OBOT) practices of various specializations—primary care, pediatrics, obstetrics and gynecology, orthopedics, and psychiatry, often serving small numbers. This reflects increase in access by geographical proximity, variety of service specialty, and total points of service.

The total number of people receiving MAT services through the Hub and Spoke system since the program's inception has increased by more than 50 percent. The Hub system has significantly increased caseload from 650 patients in 2012 to 2,723 in 2015, a 76-percent increase. The Spokes have not grown as fast as the Hubs, seeing a caseload increase of only 21 percent during this period. See Table 2 below.

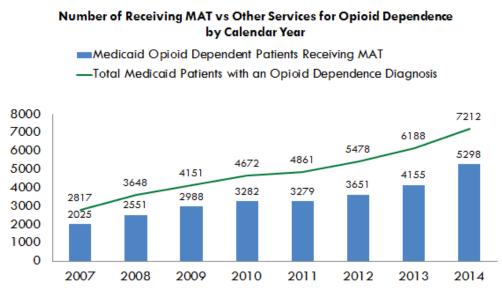
Table 2. Caseloads in Hubs and Spokes, 2012 and 2015

TREATMENT	# OF PATIENTS	# OF PATIENTS	% CHANGE
MODALITY	(2012)	(2015)	
Hubs	650	2723	76%
Spokes	1700	2143	21%
TOTAL	2350	4866	52%

Note: Physicians generally report 0–35% of OBOT caseloads outside of the Medicaid population, with significant variance by region of the state. Data reported in April 2012 and then in 2015 at the AATOD national conferences.

By 2014, the total number of Medicaid patients with an opioid dependence diagnosis treated in Vermont's larger Integrated Treatment System for Addictions Treatment was 7,212, with 5,298 individuals receiving MAT in the Hub and Spoke system. That is, approximately 73 percent of all Medicaid patients with an opioid dependence diagnosis are relying on the Hub and Spoke system for services. This reflects a significant increase in access to services. See Figure 7 below.

Figure 7.



The Vermont Department of Health's performance dashboard includes "access to MAT" as a key performance measure of SUD treatment programming. Specifically, data are gathered to determine, "Are adults that seek help for opioid addiction receiving treatment?" This is measured as the number of people receiving MAT per 10,000 Vermonters aged 18–64. The goal is 100 per 10,000 Vermonters. Progress on this measure as of the third quarter of 2014 shows 91 per 10,000 Vermonters received MAT treatment, with consistent increases in "access to MAT" achieved since the implementation of the Care Alliance for Opioid Addiction. See Figure 8 below.

Source: Vermont Medicaid Claims

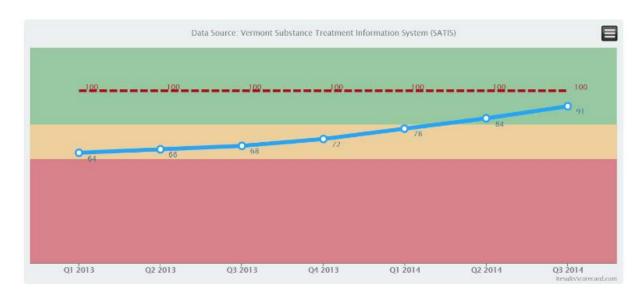


Figure 8. Number Receiving MAT per 10,000 Adult Vermonters, 2013–2014

All the above data show that significantly increased access to care has indeed occurred since the inception of Vermont's Hub and Spoke health home initiative. Furthermore, data show a shift from a 30–70-percent to a 50–50-percent ratio of patients in treated in Hubs versus Spokes. Continued waitlists at all elements in the system show that the Hub and Spoke system is still facing unmet need. Eventually, it is expected that the initial ratios will return, once Spokes are brought up to full capacity. There are also still significant regional differences, with the greatest need for additional expanded capacity occurring in the northwest of the state. Expansion efforts continue in both the Hub and Spokes segments of the system.¹⁶

2. The system design needed to improve quality of care.

As mentioned previously, MAT, when delivered in conjunction with appropriate supportive counseling and behavioral therapies, has long been recognized as a highly effective, evidence-based treatment approach to opioid addiction. The Hub and Spoke model is built around evidence-based treatment approach as fundamental to improved quality and effectiveness of care.

Vermont promulgated new Medication Assisted Therapy for Opioid Dependence Rules that bring all MAT programs under the authority of the Department of Health and subject to review for compliance by ADAP. The scope of the standards and criteria include, but are not limited to, facility and clinical management, risk management, quality improvement, medical and behavioral health standards, and the care and treatment of special populations.

The Vermont Department of Health ADAP also published updated and revised service standards and guidelines for all providers, including specialty standards of care. The guidelines require all

¹⁶ Substance Abuse Treatment Services, Objectives and Performance Measures Progress: First Annual Report, In Accordance with Act 179 (2014), Sec.E.306.2(a)(1), Report to the Vermont Legislature. http://legislature.vermont.gov/assets/Legislative-Reports/SA-system-performance-first-annual-report-5.1.15-final-pdf

providers to have in place written nondiscrimination policies and procedures, a code of ethics governing behavior of staff and business practice, plans relating to cultural competence and supervisory practices, and criteria for prioritizing need and high-risk populations.

Despite system expansions, there are still people waiting for MAT services in Hubs, further demonstrating that additional capacity is needed. At this time, further expansions have begun to slow, principally due to workforce challenges, including staffing limitations and resistance among some physicians to treat opioid addiction in their practices. However, the waitlist continues to remain level despite growth in the number of those with opioid dependence. See Figure 9 below.



Figure 9. Hub Patients and Waiting List Over Time

Source: ADAP Hub Waitlist and Census.

Vermont recently was awarded a SAMHSA grant that aims to develop a free national mentoring network that will provide clinical support (e.g., clinical updates, consultations, evidence-based outcomes, and training) to physicians, dentists, and other medical professionals in the appropriate use of opioids for the treatment of chronic pain and opioid-related addiction. Specifically, Vermont is using the grant to do four things:

- Organize a multidisciplinary community-based team within each patient-centered medical home/neighborhood.
- Offer the option of naltrexone intramuscular (IM) gluteal injection in the Hubs and Spokes.
- Implement evidence-based integrated psychosocial treatments in the specialty addiction treatment agencies.
- Build recovery capital by engaging peer recovery support guides at the outset of treatment.

These all represent *efforts to improve quality of care by supporting creative new ways to reach the highest risk populations*, namely, (1) those who are involved in the criminal justice system and who are in the community; (2) those who are parents and who are involved in the child welfare system; and (3) those who are motivated for MAT but, due to limited capacity, are put on waitlists. Key features include "Pathway Guides," MAT coordinators, and new medication delivery testing including use of naltrexone (Vivitrol®) and take-home Med-O-Wheels (pill dispensers).

Under the Blueprint for Health, Vermont's primary care practices, some of which are Spokes, are supported to meet the National Committee for Quality Assurance (NCQA) PCMH Standards. These standards support higher quality care and improve patient and provider experiences of care. The Blueprint for Health is also supporting the Hubs to meet the NCQA Specialty Practice Standards. The specialty standards focus on quality improvement and increasing coordination of care between primary health care and specialty services. This is one of the first uses of the NCQA specialist standards for addictions treatment in the nation. The goal is for all five Hubs to complete a baseline measure against the standards by July 2015. All five Hubs have begun the process, with one successfully receiving certification.

Per-patient-per-month (PPPM) payments are made to providers based on the scoring level achieved by the primary care practice in NCQA PCMH recognition standards. This payment incentivizes practices to improve quality against national standards. It promotes access, communication, guideline-based care, well-coordinated preventive health services, use of electronic tracking systems, and population management. All insurers share the cost for core CHT—and as such, it is a payment for capacity. The shared funding for CHT is provided at the rate of \$70,000 (about one full-time equivalent) per 4000 patients, which amounts to about \$1.50 per patient per month. This capacity payment reform establishes a community-based care support infrastructure available to primary care practices and the general populations they serve. The CHT is supported 6 months prior to a practice's NCQA score date, further underscoring the Blueprint partners' commitment to the spread of quality improvement. This payment is routed to an administrative entity in each HSA to support community health team operations. ¹⁷

With faculty leadership from the Dartmouth Health System's Addiction Medicine, monthly inperson and phone webinars bring program staff together for program improvement. The goal is to improve care in each practice setting and to standardize care across the statewide system. These networks provide a practical and efficient mechanism to drive improvements in the standard of care and to ensure coordination between providers statewide. ¹⁸

To support the Hub and Spoke practice reforms, the Blueprint (in collaboration with ADAP) convened six regional learning collaboratives focused on MAT for opiate addiction in 2013 and 2014. More than 35 Spoke practices and all Hub programs have sent or are sending teams with physicians, nurses, medical assistants, and office managers to the opioid treatment collaboratives, with 29 physician leaders attending most sessions with teams. The second-year

http://legislature.vermont.gov/assets/Legislative-Reports/VTBlueprintforHealthAnnualReport2014-Final.2015.01.26.pdf, p. 83.

¹⁷ http://legislature.vermont.gov/assets/Legislative-Reports/VTBlueprintforHealthAnnualReport2014-Final.2015.01.26.pdf, p. 99.

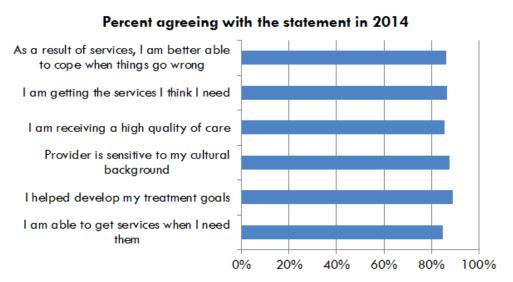
curriculum includes the following topics: pregnancy and buprenorphine, chronic pain and management of pain for individuals with addiction, treating anxiety in patients addicted to opioids, managing other substances of abuse (alcohol, THC, etc.) in patients with opioid addiction, and supporting recovery.

The collaboratives take place over 10 months and consist of four to five half-day, in-person sessions and five 1-hour webinars. The content includes didactic lectures, case examples, and presentations about how best practice is implemented in clinical care.

In addition, each practice reports on common measures important to evidence-based care. The opioid addiction treatment collaborative included measures for use of the VPMS; monthly urine analysis; treatment retention; and rates of patients receiving above the recommended dose, or more than 16 mg of buprenorphine daily (a risk for diversion). The current collaboratives are also measuring travel time to care and use of benzodiazepines (contraindicated when buprenorphine is prescribed). Throughout the collaborative, practices work to improve their performance on these measures and other aspects of care. These collaboratives prove to be a powerful tool to improve the standard of care for opioid addiction rapidly.

Finally, in 2014, the percent of Hub patients reported satisfaction exceeded 80 percent across all "customer satisfaction" questions. See Figure 10 below.

Figure 10.



Source: Alcohol and Drug Abuse Programs, Hub Customer Satisfaction Survey

3. The system design needed to achieve greater cost effectiveness.

The Care Alliance Hub and Spoke health home model was built on existing infrastructure. The planned expansions and enhancements were designed to achieve greater cost effectiveness. Preliminary evaluation results from 2007–2013 Vermont Medicaid data indicate:

 Individuals with an opioid dependent diagnosis receiving MAT have lower medical costs than those who have an opioid dependent diagnosis and are receiving non-MAT SUD treatment. • Longer MAT corresponds to lower non-treatment- related medical care costs. 19

Furthermore, "DVHA has projected that for the 2,164 patients estimated to be served statewide, the savings will be \$6.7 million." These savings are cost modeled to derive from the following:

- Decreases in unnecessary and even higher-cost health care expenditures (e.g. medically unnecessary emergency room visits and hospital visits; pharmacy; inpatient; lab; and residential treatment);
- Decreases in societal impacts and savings anticipated in areas such as corrections, employment, and children in custody;²¹
- Decreases due to increased productivity, given that because the health home framework
 has enabled more comprehensive services, individuals are being retained in treatment
 longer—an evidence-based factor showing overall improved functioning compared to
 status at admission.

Conclusion/Recommendations

This paper has set out the details of the three essential elements of Vermont's Hub and Spoke health home initiative. Furthermore, it has presented some of the initial evidence to determine if Vermont's model is sufficiently robust and efficacious to effectively address the growing opioid crisis. While it is too early to demonstrate definitively, data are demonstrating significant positive results on two of three criteria of success, with early indication of positive results on the third.

Firstly, the initiative has significantly increased access to care as measured by increases in the number of Hubs, number of Spokes, number of patients in both Hubs and Spokes, and number of patients receiving MAT per 10,000 Vermonters.

Secondly, Vermont has made widespread investments to ensure improved quality of care, including focusing on expanding the evidence-based practice, MAT for the treatment of opioid addictions. Other efforts to improve quality of care include adopting and establishing new and higher standards of care; supporting better collaboration and innovation for more effective medication delivery; and better care coordination to meet the needs of this very high risk, complex, and sometimes hard-to-reach population. Data show excellent results to date, demonstrating improvements in quality of care by earning very high satisfaction ratings among patients in Hubs and holding waitlists level despite growing numbers with opioid dependence.

Finally, while it is too early to demonstrate this definitively, there is strong indication that the system design will indeed produce greater cost-effectiveness. Significant cost savings are already being realized by averting unnecessary, higher-cost health care expenditures and social and legal impacts associated with opioid misuse and dependence and treatment strategies in the absence of the Hub and Spoke model.

¹⁹ http://legislature.vermont.gov/assets/Legislative-Reports/Opioid-system-effectiveness-1.14.15.pdf

Testimony to Vermont legislature, March 20, 2014.

²¹ Integrated Treatment Continuum for Substance Use Dependence; "Hub/Spoke" Initiative—Phase 1: Opiate Dependence, January 2012, Vermont Agency of Human Services briefing document.

One of the major challenges for the future is workforce development. First, many clinicians with specialized skills necessary to support the system, including Licensed Drug and Alcohol Counselors (LADCs), are nearing retirement, and the field is less attractive to people beginning their careers due to low salaries, the inability of private practitioner LADCs to bill Medicaid, and the challenging population being treated. This issue is not unique to Vermont; it's a problem nationwide.

Related to this problem is the challenge of further expanding Spoke capacity to match the array and functioning of the regional Hubs. The northwestern region of the state is particularly in need of increased capacity. The ability of Hubs to transfer stable patients allows the Hubs to focus on their target group of patients with greater needs and decrease Hub waiting lists. Similar resistance is sometimes also observed among potential physician practices to work with this population and provide OBOT. The model has built-in payment incentives that are working to some extent to increase the number of Spokes. Furthermore, there is work underway to determine if rate adjustments might be made to better defray costs of treatment services in both Hubs and Spokes, without adversely impacting the cost modeling.

Currently, the total number of patients a physician can prescribe to is capped by federal policy at 100 patients. SAMHSA is evaluating an increase in the cap of 100 patients an established physician can treat with buprenorphine. Because Vermont provides additional supports to physicians treating this population in the form of the Spoke staff, this would allow existing qualified physicians to treat more patients while maintaining high-quality care.

Despite the immediate challenges, it appears that Vermont is indeed successfully, and paradoxically, combining a high cost structure with high cost medication to achieve improved patient care (e.g., increased access and improved quality of care) at reduced costs for the state's health system (e.g., greater cost effectiveness).

Integration of Health Homes in Rhode Island OTPs By Sue Storti, Ph.D., RN, NEA-BC, CARN-AP

Introduction

During the past decade, the United States has witnessed an unprecedented increase in morbidity and mortality associated with the misuse of and addiction to tobacco, alcohol, and illicit drugs. The combined cost related to crime, lost work productivity, and health care is more than \$700 billion annually. Of particular concern is the increasing rate of opioid dependency and the rising number of opioid overdoses (Drug Enforcement Administration, 2014). It is estimated that there are at least 1.7 million individuals in the United States who are experiencing opioid drug dependence, costing approximately \$21 billion per year, with drug treatment expenses and accounting for 5.7 percent of the total cost (Hersh, Little, & Gleghorn, 2011; Manchikanti et al., 2012; Stancliff et al., 2012). Additionally, the cost of prescription opioid medication misuse is estimated at \$4.6 billion in the workplace, \$2.6 billion in health care, and \$1.4 billion to the criminal justice system (Birnbaum, 2006).

Creating and implementing effective recovery-oriented, person-centered treatment systems is an important investment for society and offers the treatment opioid dependent patients need. Medication-assisted treatment (MAT) in combination with counseling has long been recognized as the most effective treatment for opiate addiction.

Health Homes

The Patient Protection and Affordable Care Act (called the Affordable Care Act for short) takes significant strides toward transforming the health care delivery system from a system that rewards volume to a system that rewards quality and value (U.S. Congress, 2010). The programs and initiatives authorized by the Affordable Care Act hold the potential to reduce cost and improve the quality of care through more coordinated care and reimbursement methods that reward coordinated care.

One such opportunity afforded under the Affordable Care Act is for states to receive funding for "Coordinated Care through a health home for Individuals with Chronic Conditions," also referred to as health home services (Substance Abuse and Mental Health Services Administration [SAMHSA]—Health Resources and Services Administration [HRSA] Center for Integrated Health Solutions [CHIS], 2013). This provision presents an opportunity to build a patient-centered system of care that provides health care for beneficiaries of the state Medicaid program. Its service delivery approach facilitates access to an interdisciplinary array of medical care, behavioral health care, and community based social services and supports for both children and adults with chronic conditions (Centers for Medicare & Medicaid Services [CMS], 2010a).

To be eligible to receive health home services, Medicaid beneficiaries must have at least two chronic conditions (e.g., mental health condition, substance use disorder [SUD], asthma, diabetes, heart disease, a body mass index [BMI] greater than 25); have one chronic condition and the risk of a second; or have one serious and persistent mental health condition. It is

designed as a strategy for improving patient-centeredness and improving quality and access to care while decreasing cost by coordinating comprehensive care across all care settings, including medical care, behavioral health care, and social services (CMS, 2010b).

As per the criteria set forth by CMS, health home providers must provide six core services. These include comprehensive care management; care coordination and health promotion; comprehensive transitional care from inpatient to other settings, including appropriate follow-up; individual and family support, which includes authorized representatives; referral to community and social support services, if relevant; and the use of health information technology to link services.

Each health home includes a team of physicians and other providers, including behavioral health care professionals. Under the Affordable Care Act, health home services may be provided by a "designated provider," which may be a physician, practice, clinic, or other entity or provider; a team of health professionals linked to a designated provider; or a community health team.

Health Homes Versus Patient-centered Medical Homes

While there are similarities between patient centered medical homes (PCMH) and health homes, there are also differences. The Medicaid health home option uses the patient-centered medical home as its foundation (CMS, 2010a). The PCMH was initially designed as a health care model for addressing the complex needs of children with multiple medical conditions. According to the American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, and American Osteopathic Association (2007), it was later adopted for use by the health care field to encourage individuals to use primary care practices as the basis for accessible, continuous, comprehensive, and integrated care. The PCMH is built on the framework of the chronic care model designed to improve the treatment of chronic health conditions in the primary care setting (Wagner, 1998; Wagner, Austin, & Von Korff, 1996). To that end, the PCMH is to provide a patient with a broad spectrum of care, both preventive and curative, over a period of time, and to coordinate all of the care the patient receives.

This model was further developed, leading to innovations supported through a collaborative process between the Office on Disability, the Department of Health and Human Services including SAMHSA, HRSA, and CMS. Today, many state Medicaid programs have developed medical home models, and states receive reimbursement for medical homes through a variety of authorities (CMS, 2010a).

Health homes expand the medical home model to build linkages to other community and social supports and to enhance coordination of medical and behavioral health care needed by an individual with chronic health care conditions. They are designed to enhance person-centered care, empowering individuals to manage and prevent chronic care conditions in order to improve health outcomes, while reducing avoidable hospital encounters.

Why Develop Substance Use Treatment Program or Opioid Treatment Program Health Homes?

One of the major results from the pressure to reduce costs of treating addiction has led to increased utilization of outpatient programs (Edmunds et al., 1996). A related effort toward

health care cost containment has been the reduction of social support services—such as housing referral, employment counseling, legal assistance, and parenting aid—that have traditionally been provided within addiction treatment programs, while at the same time the severity of addiction and social problems presented by admissions to treatment programs increased significantly (Etheridge, Craddock, Dunteman, & Hubbard, 1994).

Often, these individuals have high rates of co-occurring mental health and other health issues (Cherubin & Sapira, 1993; Center for Substance Abuse Treatment [CSAT], 2005; Gourevitch & Arnsten, 2005; Weisner, Mertens, Parthasarathy, Moore, & Lu, 2001) and are high users of emergency rooms (Billings & Raven, 2013; Capp et al., 2013; Dans et al., 1990; Grembowski et al., 2014; National Council for Community Behavioral Healthcare, 2010), pharmacy benefits, and other health care services (Fox et al., 1995; Laine et al., 2001; Stein et al., 1993). Research has shown that this group represents one of the highest rates of treat-and-release emergency department visits in general (Capp et al., 2013) and revisits within 30 days of hospitalization (Irmiter, Barry, Cohen, & Blow, 2009; Vashi et al., 2013).

Science has shown that addiction is a chronic, relapsing illness. As with any chronic illness, a comprehensive approach is essential to achieve positive patient outcomes (National Institute on Drug Abuse, 2012; Samet, Friedmann, & Saitz, 2001). Components of this approach include access to care, or being able to receive care in a timely manner from an appropriate provider (Berry, Seiders, & Wilder, 2003; Hendryx, Ahern, Lovrich, & McCurdy, 2002); coordination of care (Walley, Farrar, Cheng, Alford, & Samet, 2009); medication monitoring to promote adherence; and social support services, such as housing referral, employment counseling, legal assistance, and parenting aid (D'Aunno & Vaughn, 1995; Kraft, Rothbard, Hadley, McLellan, & Asch, 1997; McLellan, Arndt, Metzger, Woody, & O'Brien, 1993).

Research has demonstrated that care coordination in substance use treatment settings and opioid treatment are efficacious in increasing a patient's adherence to routine medical care, housing assistance, and other social services (Friedmann, D'Aunno, Jin, & Alexander, 2000; Masson et al., 2013; Saitz, Horton, Larson, Winter, & Samet, 2005; Umbricht-Schneiter, Ginn, Pabst, & Bigelow, 1994). When addiction is treated as other chronic illnesses, treatment is optimized, resulting in better long-term outcomes (McKay, 2005; McLellan, Lewis, O'Brien, & Kleber, 2000; Saitz, Larson, LaBelle, Richardson, & Samet, 2009).

Traditionally, SUD treatment services have been separate from and uncoordinated with the broader health care delivery system. For individuals with comorbid behavioral health and physical health conditions, this fragmentation compromises quality of care as well as clinical outcomes.

This is particularly true for patients receiving MAT in opioid treatment programs (OTPs). They are unlikely to use traditional medical services as many fear discriminatory or hostile behavior from the medical staff. The effect of negative attitudes associated with SUDs can lead to diminished self-esteem, lessens an individual's ability to participate in the management of their illness, weakens self-determination, and prevents individuals from gaining proper and timely medical care, resulting in suboptimal clinical outcomes (Christison, Haviland, & Riggs, 2002; Institute of Medicine [IOM], 2006; McLellan et al., 2000) and negatively affecting a patient's

likelihood of recovery (IOM, 2006; Jewell, Tomlinson, & Weaver, 2011; Saitz et al., 2002; Samet, Rollnick, & Barnes, 1996; Weaver, 2006; York & Freed, 2000). Patients who don't receive a positive, patient-centered approach are at risk for being less satisfied and less enabled, and they may have greater symptom burden and use more health service resources (Little et al., 2001).

Substance use disorder treatment programs provide the opportunity for frequent contact with medical and/or clinical professionals who have developed ongoing therapeutic relationships with patients. This enables providers to use existing and enhanced resources to improve the health of patients and decrease inadequate and/or ineffective medical care through development of stronger formalized relationships between the treatment programs and community health care providers (McLellan et al., 2000). Provision of this service positively impacts the health and welfare of patients and reduces overall health care costs by focusing on relationships with primary and specialty care, versus emergency room care (Gerstein et al., 1994; Starfield & Shi, 2004; Starfield, Shi, & Macinko, 2005); wellness promotion and health literacy (Hibbard, Greene, & Overton, 2013; Robert Wood Johnson Foundation, 2013); routine and preventative health monitoring; and care management with recovery supports that promote self-care (Samet, Friedmann, & Saitz, 2001).

The health home also provides an opportunity for patients to experience positive relationships with health care providers. An extensive body of literature supports the notion that positive patient experience is associated with improved health outcomes and better medication adherence (Greenfield, Kaplan, & Ware, 1985; Heyworth et al., 2014; Hibbard et al., 2013; Sequist et al., 2008). Research has also shown that drug users' risk of hospitalization is reduced by having a regular source of medical care (Laine et al., 2001) and by participating in treatment.

Planning for Health Homes Within a Substance Abuse Treatment Program

Communication and active collaboration across systems are essential to ensure that patients with SUDs receive appropriate services in a timely manner. To meet complex needs, collaborative practice provides access to a wider array of resources than is traditionally available from an individual system.

Planning the design of a health home involves consideration of several key components.

1. To promote systems change, foster community, cultivate networks, and support health home providers to achieve culture change.

While system change can be incredibly complex, the concept is quite straightforward. To achieve systems change, leaders must cross boundaries and bring people addressing parts of the problem around the same table. Be sure to keep asking: "Who's being left out?" and "Who should be in the room?" Seize opportunities to develop new relationships with existing resources; take advantage of the system's capacity for generating creative solutions, link with ongoing initiatives, and nurture networks of connection and communication.

2. Establish communication mechanisms between partners.

Communication within and across providers is a fundamental component in achieving the health homes model's aims of care integration, management, and coordination. The extent to which new patterns of communication and new protocols are needed depends in part on how much of a change from the existing care system the health home program represents. Issues can arise when communication beyond the team or health home is necessary.

3. Use the flexibilities within the health home option to advance policy goals.

One of the major results from the pressure to reduce costs has been increased utilization of outpatient programs, along with a reduction of social support services. The statute provides flexibility such that states can utilize the enhanced federal match to establish new services that address gaps in care for individuals with complex chronic health needs, thus providing integrated care while achieving cost savings dictated by state policy (Moses & Ensslin, 2014).

4. Strategically identify health home target populations, define health home services, and select the health home option to achieve the greatest impact on outcomes.

Population selection is the basis for key design decisions, such as developing service definitions and provider qualifications, and is also directly related to outcomes, which are keys to sustainability. Completing a preliminary assessment to determine the acuity levels assists states to determine the specific condition to be targeted and the composition of the health home team, and enables provision of the right amount of care management at the right time (Moses & Ensslin, 2014). Under the Affordable Care Act, health home services may be provided by a designated provider, which may be a physician, practice, clinic, or other entity or provider; a team of health professionals linked to a designated provider; or a community health team. This provides states broad latitude to determine the providers or entities that can serve as health homes (CMS, 2010b). While some programs will hire health home staff, others will create health relationships with patients.

5. Design the payment method to drive policy goals

Health homes provide a vehicle to pay for services that have historically been difficult to reimburse. States have the flexibility to design the payment method that drives policy goals. While some states utilize a bundled rate approach (usually in the form of per-member-per-month payment), others have created tiered payment schedules, scaling either by level of member complexity or by the qualifications of the provider (Moses & Ensslin, 2014). However the states choose to move forward, designing a payment model that ensures delivery of high quality care.

6. Determine heath information technology requirements.

Real-time data is essential for care coordination and management. Given that states fall within a wide spectrum of health information technology adoption, determining what is and is not possible will be vital in determining how this will be proposed within the State Plan Amendment.

7. Define state specific health home goals and measures.

In addition to the eight health home core measures recommended by CMS to assess individual level and clinical outcomes and care processes, states are expected to define goals for their health

home services model and to identify quality measures that reflect accomplishment of the goal. These measures supplement the required core measures. These measures should be defined based on the selected target population and services to be provided.

Guide for Health Home Implementation

Following is a general outline to assist SUD treatment programs in the implementation of a health home. It is important to remember system change takes time, and thus consideration may be given to a phase-in implementation strategy. Anticipate that time will be needed for infrastructure development, including education and training for staff to adopt new practices or use new tools.

- Goal 1: Develop an understanding of the health home's key clinical features and system-level infrastructure needs.
 - Objective 1: Conduct an assessment of the substance abuse treatment program environment.
- Goal 2: Create strategic integrated plan, including establishment of health home teams and the development of policies, procedures, and general guidelines.
 - Objective 1: Establish health home care coordination teams.
 - Objective 2: Develop standardized policies, procedures and general guidelines to assist substance abuse treatment programs in the implementation of health homes.
 - Objective 3: Establish processes and documentation requirements for the provision of care coordination and disease management.
 - Objective 4: Support the successful implementation of and fidelity to the health home model.
 - Objective 5: Review and implement evidence-based treatment guidelines that establish clinical pathways to follow patients across risk levels or health conditions.
- Goal 3: Identify and/or provide training to assist substance abuse treatment programs in the implementation of health homes.
 - Objective 1: Identify and or conduct cross-training for identified training topics related to common and prevalent chronic medical and behavioral illnesses.
- Goal 4: Establish communication guidelines to facilitate and support health home implementation and branding.
 - Objective 1: Facilitate communication between and among all internal and external providers, patients, state and federal entities.
 - Objective 2: Establish agreements that formalize the necessary partnerships with community partners
- Goal 5: Demonstrate compliance with rules and regulations from the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities and Hospitals (BHDDH) as they apply to OTP health homes.
 - Objective 1: Provide support to the OTP infrastructure in the delivery of health home services.

Goal 6: Establish a continuous quality improvement program and collect and report on data that permits an evaluation of increased coordination of care and chronic disease management.

- Objective 1: Establish a mechanism for information management.
- Objective 2: Create database or work with the State to access a database that can be accessed to inform health home performance and outcomes.
- Objective 3: Create health information technology linkages to document and monitor health home performance measures and outcomes.
- Objective 4: Track/trend outcome data utilizing health information technology to improve service delivery and coordination.

Ongoing Challenges and Lessons Learned

Since inception, states with approved State Plan Amendments to implement Medicaid health home models have shared their experiences. With each review and evaluation, ongoing challenges and lessons learned have been well documented (Moses & Enssin, 2014; Moses & Klebonis, 2015; Nardon & Paradise, 2014; Ormond, Richardson, Spillman, & Feder, 2013; SAMHSA–HRSA CHIS, 2013; Spillman, Ormond, & Richardson, 2012; Unützer, Harbin, Schoenbaum, & Druss, 2013). Following is a summary of these findings.

1. Managed care organizations (MCOs)

The management of care for high-need, high-cost enrollees logically could be thought of as the responsibility of MCOs. The development of a new entity for care management, paid according to a separate structure, can be seen as usurping the role of the MCO. The health home guidelines require that there not be duplication of payment for services, which requires careful specification of the different roles that health homes and MCOs take in care coordination. Development of protocols for care coordination will assist in clarifying roles and responsibilities.

2. Barriers to accessing data

Complete, timely, and accurate data are important both for health homes services—case management, care coordination, and care transitions—and for program evaluation. Yet, data from other payers, particularly Medicaid, typically are not available to health home providers, leaving a gap in their knowledge of enrollee utilization and needs.

Data on specific services of particular importance to the health home population also need special attention. This is particularly true for the regulations governing sharing of patient information on substance misuse, mental health, and human immunodeficiency virus (HIV) status require additional patient agreements. Getting the necessary consent forms in place has proved challenging. While some states are working to "centralize" permissions, this continues to be a challenge.

3. *Infrastructure development and practice transformation*

How successful implementation of the health home model becomes is dependent in part on where the organization started from, its existing strengths and weaknesses, and leadership at the practice level. In many cases programs have been challenged to put in place all of the needed

health home components and achieve the necessary culture change, feeling the need for an additional 6 or even 12 months to develop the program infrastructure.

As expected, the introduction of health homes precipitates change throughout the organization, but it is most acutely felt on the front lines, at the provider level. To transition to health homes, providers may need support in a variety of areas, including understanding program requirements, redesigning workflows, and training in new skills.

Patients also experience changes, from new staff being hired to linkages with new resources. To reduce resistance, patients should be encouraged to participate in the planning process. This may be done through patient advisory committees, surveys, or focus groups.

4. Identify and/or develop reporting systems needed for outcomes, payment and patient tracking

Use of information technology affects three important health home components: care coordination, use of community services and supports, and integration of behavioral and primary health care. Information technology requirements that health homes must meet vary, and electronic health records (EHRs) are not yet the norm nor are health information exchanges reliably in place to facilitate communication.

Some issues are specific to moving care outside the clinic walls. Saving data to a laptop while providing or supervising community services poses security issues. Often the services provided in the community are not easily documented on current EHRs and may be less adaptable to coding in an EHR. More generally, EHRs may need to be modified to incorporate health home services, especially the nonclinical community support services.

5. Prearrange core services

With the introduction of the Affordable Care Act, many patients entered into the health care system quickly. This resulted in waiting lists at most health care provider practices and Federally Qualified Health Centers. By developing memorandums of understanding, qualified service agreements, and the like with community agencies, hospitals, MCOs, and other providers, health homes can assure that needed services are available and accessible to patients when needed.

Looking Ahead—What Are the Essential Elements That Need To Be Employed in Addiction Treatment as Part of a Health Home Program?

1. Provider–state agreements

Collaboration, communication, and flexibility are needed on the part of the state and the provider when entering into a partnership to establish health homes. This applies to several areas, including, but not limited to:

- Identification or development of a reporting system needed for outcomes, payment, and patient tracking.
- Alignment of state SUD treatment program licensing regulations with CMS expectations in an effort to assure all health home criteria are met.
- Time provided for infrastructure development prior to full implementation of health homes.

- Development of standardized forms, guidelines, protocols, and other tools that meet state and CMS requirements.
- Consideration of a phase-in implementation plan to allow for review and revision prior to full implementation.
- Development of state-based communication mechanisms with health care systems, managed care organizations, community health centers, and others to facilitate understanding of health homes and the development of collaborative working relationships, for all involved.
- The flexibility to address the changing needs of the target population as they are identified

2. Programmatic considerations

There are minimal conditions under which the health home program can be effective. First, begin infrastructure development prior to beginning implementation process. Second, there is a requirement for administrative support, continuous training, and a commitment to work in integration with the counseling staff. Third, there is a need for services to manage. Prearranging or precontracting with community agencies appears to be one politically and practically sound method to do this; there may be other, equally effective strategies. Fourth, instituting a stratification process to determine patients with higher need will provide guidance in determining team composition and staffing patterns, enable better utilization of health home team members' expertise, and assist in measuring outcomes. Finally, there is a need for sustained effort to insure that the "paradigm shift" to health home has adequate time to be incorporated.

3. Financing components

Health homes are a vehicle to move away from a fee-for-service model toward more meaningful, value-based purchasing. States and programs should work together when developing the health home payment methods. One method may be the creation of a tiered payment schedule, scaling either by level of member complexity or by the qualification of the provider. Other options currently being considered are the evolution of health homes into accountable care organizations, with shared savings and shared risk, or replacement of care management fees with more expansive global waivers (Moses & Ensslin, 2014). Whatever the payment approach selected, both the state and the treatment programs should work toward a performance- and outcome-based system.

Conclusion

The health homes initiative is just one piece of the broader reform process set in motion by the Affordable Care Act. Yet, the Affordable Care Act's explicit inclusion of behavioral health conditions in the list of health home qualifying conditions, and the health home program's emphasis on person-centered care management that integrates physical and behavioral health care, reflect the premise that health homes are a promising model for individuals with SUDs. The potential is great, but the challenges are many. Changing the culture of health care delivery will take time and thus requires perseverance. The long-term sustainability of health homes will require good data and careful analysis to determine if the initiative improves quality, reduces fragmentation of care, and supports states' other health care payment and delivery reforms.

References

American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, & American Osteopathic Association. (2007). *Joint principles of the patient-centered medical home*. Retrieved from www.pcpcc.net/content/join-principles-patient-centered-medical-home

Berry L. L., Seiders, K., & Wilder, S. S. (2003). Innovations in access to care: A patient-centered approach. *Annals of Internal Medicine*, *139*(7), 568–574.

Billings, J., & Raven, M. S. (2013). Dispelling an urban legend: Frequent emergency department users have substantial burden of disease. *Health Affairs*, 32(12), 2099–2108.

Birnbaum, H. G., White, A. G., Reynolds, J. L., Greenberg, P. E., Zhang, M., et al. (2006). Estimated costs of prescription opioid analgesic abuse in the United States in 2001: A societal perspective. *Clinical Journal of Pain*, 22(8), 667-76.

Capp, R., Rosenthal, M. S., Desai, M. M., Kelley, L., Borgstrom, C., Cobbs-Lomax, D. L., ... Spatz, E. S. (2013). Characteristics of Medicaid enrollees with frequent ER use. *American Journal of Emergency Medicine*, *31*(9), 1333–1337.

Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. (2005). *Medication-assisted treatment for opioid addiction in opioid treatment programs*. Treatment Improvement Protocol (TIP) Series 43. HHS Publication No. (SMA) 12-4214. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Centers for Medicaid & Medicare Services. (2010a). *Letter to state Medicaid directors and state health officials*. Retrieved from www.cms.gov/smdl/downloads/SMD10024.pdf

Centers for Medicare & Medicaid Services. (2010b). *Health homes*. Retrieved from http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Integrating-Care/Health-Homes/Health-Homes.html

Cherubin, C. E., & Sapira, J. D. (1993). The medical complications of drug addiction and the medical assessment of the intravenous drug user: 25 years later. *Annals of Internal Medicine*, 119(10), 1017–1028.

Christison, G. W., Haviland, M. G., & Riggs, M. L. (2002). The medical condition regard scale: Measuring reactions to diagnoses. *Academic Medicine*, 77(3), 257–262.

Dans, P. E., Matricciani, R. M., Otter, S. E., & Reuland, D.S.(1990). Intravenous drug abuse and one academic health center. *Journal of the American Medical Association*, 263(23), 3173–3176.

D'Aunno, T., & Vaughn, T. E. (1995). An organizational analysis of service patterns in outpatient drug abuse treatment units. *Journal of Substance Abuse Treatment*, 7(1), 27–42.

- Drug Enforcement Administration, U.S. Department of Justice. (2014). *National drug threat assessment 2014*. Washington, DC: U.S. Department of Justice. Retrieved from http://www.dea.gov/resource-center/dir-ndta-unclass.pdf
- Edmunds, M., Frank, R., Hogan, M., McCarty, D., Robinson-Beale, R., & Weisner, C., (Eds.). (1996). *Managing managed care: Quality improvement in behavioral health*. Washington, DC: National Academy Press.
- Etheridge, R. M., Craddock, S. G., Dunteman, G. H., & Hubbard, R. L., (1994). Treatment services in two national studies of community-based drug abuse treatment programs. *Journal of Substance Abuse Treatment*, 7(1), 9–26.
- Fox, K., Merrill, J. C., Chang, H., & Califano, J. A. (1995). Estimating the cost of substance abuse to the Medicaid Hospital Care Program. *American Journal of Public Health*, 85(1), 48–54.
- Friedmann, P. D., D'Aunno, T., Jin, L., & Alexander, J. A. (2000). Medical and psychosocial services in drug abuse treatment: Do stronger linkages promote client utilization? *Health Services Research*, 35(2), 443–465.
- Gerstein, D. R., Johnson, R. A., Harwood, H., Fountain, D., , Suter, N., & Malloy, K. (1994). Evaluating recovery services: The California drug and alcohol treatment assessment (CALDATA). General report. Sacramento, CA: California Department of Alcohol and Drug Programs.
- Gourevitch, M. N., & Arnsten, J. H. (2005). Medical complications of drug use. In J. H. Lowinson, P. Ruiz, R. B. Millman, & J. G. Langrod (Eds.), *Substance abuse: A comprehensive textbook* (4th ed.) (pp. 840–862). Philadelphia, PA: Lippincott Williams & Wilkins.
- Greenfield, S. Kaplan, S., & Ware, J. E. Jr. (1985). Expanding patient involvement in care. Effects on patient outcomes. *Annals of Internal Medicine*, *102*(4), 520–528. Gremkowski, D., Schaefer, J., Johnson, K. E., Fischer, H., Moore, S. L., Tai-Seale, M., ... LeRoy, L., for AHRQ MCC Research Network. (2014). A conceptual model of the role of complexity in the care of patients with multiple chronic conditions. *Medical Care*, *52*(Suppl 3), S7–S14. Hendryx, M. S., Ahern, M. M., Lovrich, N. P., & McCurdy, A. H. (2002). Access to health care and community social capital. *Health Services Research*, *37*(1), 87–103.
- Hersh, D., Little, S. L., & Gleghorn, A., (2011). Integrating buprenorphine treatment into a public healthcare system: The San Francisco Department of Public Health's office-based buprenorphine pilot program. *Journal of Psychoactive Drugs*, 43(2), 136–145.
- Heyworth, L., Bitton, A. Lipstiz, S. R., Schilling, T., Schiff, G. D., Bates, D. W., & Simon, S. R. (2014). Patient-centered medical home transformation with payment reform: Patient experience outcomes. *The American Journal of Managed Care*, 20(1), 782–785.

- Hibbard, J. H., Greene, J. & Overton, V. (2013). Patients with lower activation associated with higher costs; delivery systems should know their patients' 'scores.' *Health Affairs*, 32(2), 216–222.
- Institute of Medicine, Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders. (2006). *Improving the quality of health care for mental and substance-use conditions*. Washington, D.C.: National Academy Press.
- Irmiter, S., Barry, K. L., Cohen, K., & Blow, F. C. (2009). Sixteen-year predictors of substance abuse disorders diagnoses for patients with mental health disorders. *Substance Abuse*, *30*(1), 40–46.
- Jewell, C. E., Tomlinson, J., & Weaver, M. (2011). Identification and management of prescription opioid abuse in hospitalized patients. *Journal of Addictions Nursing*, 22(1), 32–38.
- Kraft, M., Rothbard, A., Hadley, T., McLellan, A., & Asch, D. (1997). Are supplementary services provided during methadone maintenance really cost-effective? *American Journal of Psychiatry*, 154(9), 1214–1219.
- Laine, C., Hauck, W. W., Gourevitch, M. N., Rothman, J., Cohen, A., & Turner, B. J. (2001). Regular outpatient medical and drug abuse care and subsequent hospitalization of persons who use illicit drugs. *Journal of the American Medical Association*, 285(18), 2355–2362.
- Little, P. Everitt, H., Williamson, I., Warner, g., Moore, M., Gould, C., ... Payne S., (2001). Observational study of effect of patient centeredness and positive approach on outcomes of general practice consultations. *British Medical Journal*, 323(7318), 908–911.
- Manchikanti, L., Helm, S., Fellows, B., Janata, J. W., Pampati, V., Grider, J. S., & Boswell, M. W. (2012). Opioid epidemic in the United States. *Pain Physician*, 15(Suppl 3), ES9–ES38.
- Masson, C. L., Delucchi, K. L., McKnight, C., Hettema, J., Khalili, M., Min, A., ... Perlman, D. C. (2013). A randomized trial of a hepatitis care coordination model in methadone maintenance treatment. *American Journal of Public Health*, 103(10), e81–e88.
- McKay, J. R. (2005). Is there a case for extended interventions for alcohol and drug use disorders? *Addiction*, 100(11), 1594–1610.
- McLellan, A. T., Arndt, I. O., Metzger, D. S., Woody, G. E., & O'Brien, C. P. (1993). The effects of psychosocial services in substance abuse treatment. *Journal of the American Medical Association*, 269(15), 1953–1959.
- McLellan, A. T., Lewis, D. C., O'Brien, C. P., & Kleber, H. D. (2000). Drug Dependence, a Chronic Medical Illness: Implications for Treatment, Insurance, and Outcomes Evaluation. *Journal of the American Medical Association*, 284(13), 1689–1695.

Moses, K., & Ensslin, B. (2014). *Seizing the opportunity: Early Medicaid health home lessons*. Issue brief. Center for Health Care Strategies. Retrieved from http://governor.nh.gov/commissions-task-forces/medicaid-care/documents/mm-04-03-2014-chcs-medicaid-home.pdf

Moses, K., & Klebonis, J. (2015). *Designing Medicaid health homes for individuals with opioid dependency: Considerations for states*. Health Home Information Resource Center, Centers for Medicare & Medicaid Services. Retrieved from https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-homes-technical-assistance/downloads/health-homes-for-opiod-dependency.pdf

Nardone, M. & Paradise, J. (2014). *Medicaid health homes: A profile of newer programs*. The Henry J. Kaiser Family Foundation. Retrieved from http://kff.org/medicaid/issue-brief/medicaid-health-homes-a-profile-of-newer-programs/

National Council for Community Behavioral Healthcare. (2010). *Substance use disorders and the person-centered healthcare home*. Washington, DC: National Council for Community Behavioral Healthcare.

National Institute on Drug Abuse. (2012). *Principles of drug addiction treatment:A research-based guide* (3rd ed.) [NIH Publication no. 12-4180]. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse. Retrieved from https://www.drugabuse.gov/sites/default/files/podat_1.pdf

Ormand, B., Richardson, E., Spillman, B., & Feder, J. (2014). Health homes in Medicaid: The promise and the challenge. The Urban Institute. Retrieved from http://www.urban.org/UploadedPDF/413032-Health-Homes-in-Medicaid-The-Promise-and-the-Challenge.pdf

Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 (2010).

Robert Wood Johnson Foundation, The. (2001). *Substance abuse: The nation's number one health problem.* Princeton, NJ: Schneider Institute for Health Policy, Brandeis University.

Saitz, R., Friedmann, P.D., Sullivan, L. M., Winter, M. R., Lloyd-Travaglini, C., Moskowitz, M. A., & Samet, J. H. (2002). Professional satisfaction experienced when caring for substance-abusing patients: Faculty and resident physician perspectives. *Journal of General Internal Medicine*, 17(5), 373–376.

Saitz, R., Horton, N. J., Larson, M. J., Winter, M., & Samet, J. H. (2005). Primary medical care and reductions in addiction severity: A prospective cohort study. *Addiction*, 100(1), 70–78.

Saitz, R., Larson, M. J., LaBelle, C. et al. (2009). The case for chronic disease management for addiction. *Journal of Addiction Medicine*, 2(2), 55–65.

- Samet, J. H., Friedmann, P., & Saitz, R. (2001). Benefits of linking primary medical care and substance abuse services: Patient, provider, and societal perspectives. *Archives of Internal Medicine*, *161*(1), 85–91.
- Samet, J. H., Rollnick, S., & Barnes, H. (1996). Beyond CAGE. A brief clinical approach after detection of substance abuse. *Archives of Internal Medicine*, *156*(20), 2287–2293.
- Sequist, T. D., Schneider, E. D., Anastario, M., Odigie, E. G., Marshall, R., Rogers, W. H., & Safran, D. G. (2008). Quality monitoring of physicians: Linking patients' experiences of care to clinical quality and outcomes. *Journal of General Internal Medicine*, 23(11), 1784–1790.
- Siegal, H. A., Fisher, J. H., Rapp, R. C., Kelliher, C. W., Wagner, J. H., O'Brien, W. F., & Cole, P. A. (1996). Enhancing substance abuse treatment with case management: Its impact on employment. *Journal of Substance Abuse Treatment*, *13*(2), 93–98.
- Spillman, B. C., Ormond, B. A., & Richardson, E. (2012). *Evaluation of the Medicaid health home option for beneficiaries with chronic conditions: Final annual report base year*. Washington, DC: U.S. Department of Health and Human Services, Office of Disability, Aging, and Long-Term Care Policy.
- Stancliff, S., Joseph, H., Fong, C., Furst, T., & Comer, S. D., (2012). Opioid maintenance treatment as a harm reduction tool for opioid-dependent individuals in New York City: The need to expand access to buprenorphine/naloxone in marginalized populations. *Journal of Addictive Diseases*, 31(3), 278–287.
- Starfield, B., & Shi, L. (2004). The medical home, access to care, and insurance: A review of evidence. *Pediatrics*, 113(5), 1493–1498.
- Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *Milbank Quarterly*, 83(3), 457–502.
- Stein, M. D., O'Sullivan, P. S., Ellis, P., Perrin, H., & Wartenberg, A. (1993). Utilization of medical services by drug abusers in detoxification. *Journal of Substance Abuse*, 5(2), 187–193.

Substance Abuse and Mental Health Services Administration—Health Resources and Services Administration Center for Integrated Health Solutions. (2013). *Financing and policy considerations for Medicaid health homes for individuals with behavioral health conditions: A discussion of selected states' approaches.* (p. 6). Washington, DC: Substance Abuse and Mental Health Services Administration—Health Resources and Services Administration Center for Integrated Health Solutions.

Umbricht-Schneiter, A., Ginn, D. H., Pabst, K. M., & Bigelow, G. E. (1994). Providing medical care to methadone clinic patients: Referral vs. on-site care. *American Journal of Public Health*, 84(2), 207–210.

Unützer, J., Harbin, H., Schoenbaum, M. & Druss, B. (2013). *The collaborative care model: An approach for integrating physical and mental health care in Medicaid health homes*. Health Home Information Resource Center, Centers for Medicare & Medicaid Services. Retrieved from https://www.medicaid.gov/State-Resource-Center/Medicaid-State-Technical-Assistance/Health-Homes-Technical-Assistance/Downloads/HH-IRC-Collaborative-5-13.pdf

Vashi, A. A., Fox, J. P., Carr, B. G., D'Onoforio, g., Pines, J. M., Ross, J. S., & Gross, C. P. (2013). Use of hospital-based acute care among patients recently discharged from the hospital. *Journal of the American Medical Association*, 309(4), 364–371.

Wagner, E. H. (1998). Chronic disease management: What will it take to improve care for chronic illness? *Effective Clinical Practice*, *I*(1), 2–4.

Wagner, E. H., Austin, B. T., & Von Korff, M. (1996). Organizing care for patients with chronic illness. *Milbank Quarterly*, 7(4), 511–544.

Walley, A. Y., Farrar, D., Cheng, D. M., Alford, D. P., & Samet, J. H. (2009). Are opioid dependence and methadone maintenance treatment (MMT) documented in the medical record? A patient safety issue. *Journal of General Internal Medicine*, 24(9), 1007–1011. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2726880/.

Weaver, M. F., (2006). Malignant pain or malignant patients? *Journal of Opioid Management*, 2(5), 1–3.

Weisner, C., Mertens, J., Parthasarathy, S., Moore, C., & Lu, Y. (2001). Integrating primary medical care with addiction treatment: A randomized controlled trial. *Journal of the American Medical Association*, 286(14), 1715–1723.

York, L., & Freed, P. (2000). Psychiatric clinical nurse specialist as chemical dependency consultant. *Journal of Addictions Nursing*, 12(1), 43–50.

Integration of Health Homes in Maryland OTPs Vickie Walters, LCSW-C and Angela Fulmer, MSN/MPH, RN

Introduction

The impact of addiction on individuals, families, and society is profound and undeniable. The indirect and direct economic costs of illicit drug use alone are estimated at 193 billion dollars (National Drug Intelligence Center, 2011). These costs related to crime, health, and productivity loss affect us all, but the effect of incarceration, poor health outcomes, and societal disengagement associated with addiction pose the heaviest burden to individuals with substance use disorders (SUDs) and their families.

Specifically, individuals with opiate use disorders often face multiple complex comorbidities that are social, behavioral, and medical in nature (Moses & Klebonis, 2015). They face substantial barriers to accessing the services they need to meet their needs and goals. According to Craig et al. (2011), "The health care and social service systems are better designed to meet isolated needs than to foster independence, resilience, and good health, and are unnecessarily complex." Siloing occurs within and between these systems. Traditionally, opioid treatment programs (OTPs) have provided support and referral for their patients' behavioral and social needs but have lacked the capacity to offer medical services or coordinated linkage to medical care. However, many OTPs have embraced holistic models of care to coordinate across disparate health and social service systems to improve the factors, also known as social determinants, that impact patients' overall health and treatment outcomes. These include access to medical care, safe neighborhoods, education, housing, and vocational opportunities.

To accomplish this, OTPs have had to rely on limited grant funding and stretch their limited budgets. Unfortunately, payment structures that could support financially sustainable models for care and service coordination did not exist until recently despite evidence that provision of medical care and psychosocial services in treatment settings improves treatment outcomes (JAMA, 1993). In 2010, the Affordable Care Act established the Medicaid health home option (Alexander & Druss, 2012), which created the opportunity for states to reimburse agencies for providing care coordination and health promotion services. To date, the Centers for Medicare & Medicaid Services (CMS) has approved 21 State Plan Amendments for health homes, and three states—Maryland, Rhode Island, and Vermont—include OTP health homes (CMS, n.d.).

OVERVIEW OF THE MARYLAND HEALTH HOME PROGRAM

The State of Maryland's health home State Plan Amendment became effective October 1, 2013. Maryland's health home program builds on larger state initiatives to integrate somatic and behavioral health care, and its goals align with the Affordable Care Act's Triple Aim to improve patient health outcomes and experience of care while reducing avoidable health care costs (Maryland Department of Health and Mental Hygiene [DHMH], 2013). The program focuses on behavioral health populations—specifically, individuals with serious and persistent mental illnesses—served by psychiatric rehabilitation programs (PRPs) or mobile treatment providers (MTPs) and persons with opioid use disorders receiving care at OTPs. These individuals must

be at risk for another chronic condition due to tobacco, alcohol, or other non-opioid substance use and enrolled in Medicaid. The health home program is meant to help providers increase their existing capacity to meet patients' health needs, building on their current holistic approach to patient care by offering care coordination and support services from providers from whom they regularly receive care.

Provider Eligibility

Providers must be Maryland Medicaid providers and must submit a health home provider application to the state. Provider organizations must also have Joint Commission or Commission on Accreditation of Rehabilitation Facilities (CARF) accreditation and obtain health home accreditation with either agency within 18 months (DHMH, 2013). The health home team must include a health home director, nurse care manager, and a consultant physician/nurse practitioner, and minimum staffing level requirements must be met according to the number of participants. Staffing requirements include a 0.5 full-time equivalent (FTE) health home director per 125 enrollees and a 0.5 FTE health home nurse care manager per 125 participants. The physician/nurse practitioner consultant must allocate 1.5 hours per enrollee per 12-month period. Administrative support staff are not required, but recommended at 0.25 FTE per 125 enrollees; care management tools may reduce administrative support needs. A consortium is permitted among smaller OTP clinics with fewer patients and/or multiple locations (DHMH, 2013).

Participant Eligibility and Enrollment

Individuals enrolled in Medicaid and receiving care from a PRP, MTS, or OTP with approved health home are eligible for enrollment if they are engaged in treatment and are at risk for additional chronic conditions due to current alcohol, tobacco, or other non-opioid substance use or have a history of alcohol, tobacco, or other non-opioid substance use. Enrollment is opt-in; however, the state, the managed care organization (MCO), or accountable care organization (ACO) refers patients to a health home when they are identified as high utilizers of emergency and inpatient services. Individuals are not eligible for enrollment in the health home if they receive services similar to those offered by the health home that are also reimbursed by Medicaid (DHMH, 2013).

Health Home Services

In order to receive reimbursement, health homes must provide at least two services to a participant in a given month. Service categories include:

- Comprehensive care management to assess, plan, monitor, and report on participant health care needs and outcomes.
- Care coordination to assure appropriate linkage to care and follow-up.
- Health promotion to aid participants in implementation of their care plans.
- Comprehensive transitional care to ease the transition when discharged from inpatient settings.
- Individual and family support services to provide support and information that is language-, literacy-, and culturally appropriate.
- Referral to community and social support services.

Reporting

Providers are required to report health home services every month and patient health and social indicator outcomes every 6 months to DHMH via Maryland's eMedicaid system.

Use of Health Information Technology

Health homes are required to use health information technology (HIT) to record and review data for individual care management and population health management. It is expected that providers will use an electronic health record (her) for recording, care management, and evaluation purposes. Providers must also use the state-developed eMedicaid Web-based tool to record intake assessment data, service delivery, and social and clinical indicator outcomes. Providers are required to be linked to a regional health information exchange for hospital encounter alerts and a prescription drug monitoring program (PDMP) for pharmacy data on Schedule II-V drugs (DHMH, 2013).

Billing and Reimbursement

Health home providers receive a capitation payment per member per month for health home services. If two services are provided in a given month, then providers receive a capitation payment of \$98.87. Both services can be provided at the same encounter. Some services don't require a patient encounter (e.g. medical records request or population health management). Additionally, providers receive a one-time payment of \$98.87 for completing a new participant's intake assessment.

Rollout

Prior to health home program rollout, the state used several methods to identify stakeholders and collect their input about the design of the health home. They included public notification in the state's administrative record; email to a behavioral health integration listserv of over 800 stakeholders and all eligible OTP, PRP, and MTPs; website notice at DHMH's health homes page; three public hearings; and two stakeholder webinars (DHMH, 2013).

OTP HEALTH HOMES: PROVIDER-LEVEL IMPLEMENTATION

OTP Health Home Characteristics

The participating organizations are stand-alone OTPs located in an urban setting. Average annual patient volume is 750. In addition to medication-assisted treatment (MAT), these programs offer outpatient care (aftercare) and an intensive outpatient program (IOP) for opioid use and other SUDs. In the IOP program, patients receive services primarily through group therapy, but they are also assigned an individual therapist they will meet with on a weekly basis while in treatment. Groups are small and generally do not exceed 10 to 12 patients, allowing for a safe and cohesive environment. The IOP may be recommended for those who do not need medically-supervised detoxification. It can also enable people in recovery to continue their therapies following successful detoxification, on a part-time yet intensive schedule—usually 3 hours per day, at least 3 days per week.

Approximately two-thirds of patients are enrolled in Medicaid,10 percent have Medicare, less than 5 percent are privately insured, and 28 percent are uninsured. The patient population is primarily Black, with equal numbers of males and females. These OTPs are located within 5 miles of several federally qualified health centers (FQHCs), hospitals(including two academic medical centers), and rehabilitation hospitals.

Patient Comorbidities

The prevalence of chronic conditions of enrolled health home participants is extremely high compared to the general population; two-thirds of the participants have a mental health disorder, more than one-third have a chronic respiratory condition, 15 percent have diabetes, 44 percent have hypertension, 3 out of 4 are obese, 1 out of 10 has human immunodeficiency virus (HIV), and almost 40 percent have hepatitis C. These numbers illustrate the poor health of the OTP patient population and thus the importance of care coordination and primary care connections for these patients.

Health Home Participant Identification

Potential health home participants are identified for enrollment by the intake coordinator at admission to OTP, self-referral/word of mouth, or referral by other members of the team, including counselor, medical providers, and dispensing nurses. Often, referrals are made during the weekly treatment team meeting or via warm handoff—an approach in which the person referring the patient provides a face-to-face introduction of the patient to the staff of the health home to which the patient is being referred.

Team Structure

In the OTPs, the health home team is structured with the participant at the center, and with all OTP staff, the patient's family and other supports, and external care providers including medical providers at the same level and working together to support the participant.

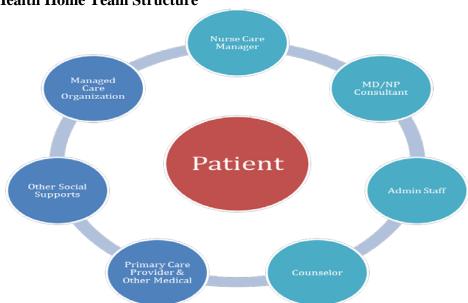


Figure 1. Health Home Team Structure

Team Roles and Responsibilities

In the structure of the OTP, counselors act as case managers to patients. They work with patients to develop and implement treatment goals, meet at regular intervals, and coordinate with the treatment team, which includes the medical director, nurse practitioner, dispensing nurses, health home nurses, and clinical directors. The OTP counseling staff remain the central point of contact for patients in the agency, and coordination of care with the nurse care manager is done according to participant's needs and goals. Some patients are reluctant to meet with a nurse care manager, and instead, they work directly with their counselors on their health goals. In these cases, the nurse care manager acts as a consultant.

Table 1. Health Home Team Member Responsibilities

Team Member	Responsibilities				
Counselor	Work with patients to develop health goals for treatment plan				
	Review/update treatment plan every 6 months				
	Provide health home services consistent with patients' treatment goals				
	Coordinate care with nurse care manager for patients with complex medical needs				
Nurse Care Manager	 Maintain caseload of up to 250 patients 				
	 Work with patients and counselors to develop and implement treatment plans 				
	Coordinate care for most complex patients				
	• Conduct 24-hour follow-up with patients who have been to the emergency room or hospitalized				
	• Provide health home services consistent with patients' treatment goals				
	• Provide health promotion and education to patients, individually and in group setting				
Health Home	Train care team on health issues, resources, etc.				
Director	Identify quality improvement opportunities				
	Lead population-level care management				
	Build partnerships with clinics, hospitals, other organizations				
	Assure all health home regulatory and accreditation requirements are met				
	Provide general administrative oversight				
	Supervise nurse care manager and administrative staff				
Physician/Nurse	Sign off on and/or performs initial intake assessment and treatment				
Practitioner	plans				
Consultant	Consult on medical issues as necessary				
	Coordinate with external medical providers				
	Participate in case reviews and quality improvement efforts				
	• Be on call to patients 24/7				
	Provide training to staff				

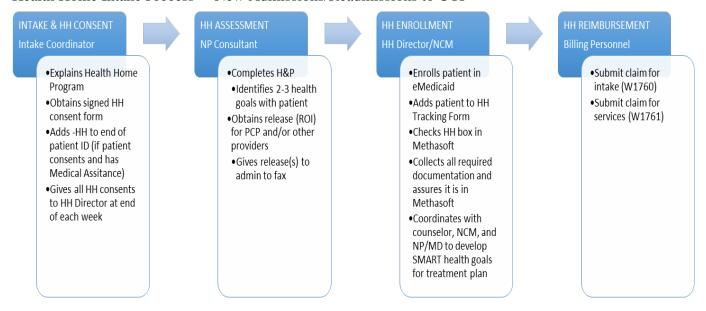
Administrative	Provide data management and reporting				
Support Staff	Schedule health home staff and participants				
	Assist with chart audits				
	• Remind participants regarding keeping appointments, filling prescriptions, etc.				
	Request and send medical records for care coordination				
Intake Coordinator	Coordinate health home enrollment for new OTP intakes				
Billing Personnel	Seek reimbursement for health home services				
Management Team	Provide leadership and support health home integration				

Health Home Enrollment/Intake Process

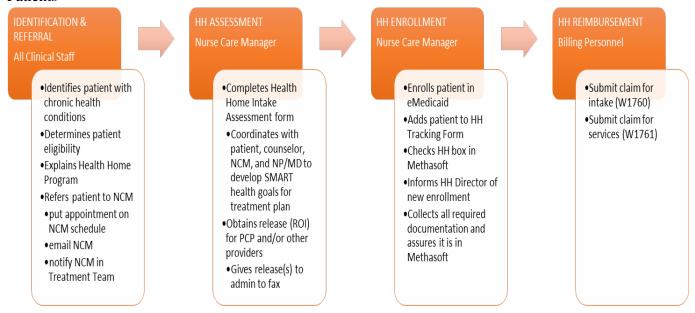
All clients who meet the eligibility requirements set forth by DHMH are eligible for enrollment in the OTP health homes. More stringent eligibility requirements have not been necessary. Health home membership is offered to all Medicaid patients on admission. The health home intake process includes a biopsychosocial assessment with physician/ nurse practitioner review, discussion of health home goals, request for medical records, drafting of a care coordination letter to the patient's primary care provider, and enrollment of the patient in the eMedicaid system. The team member responsible for these activities varies, depending on whether the patient is being enrolled in the health home as a part of the OTP admission process or is an existing OTP patient. See Figure 2.

Figure 2. Health Home Intake Process

Health Home Intake Process—New Admissions/Readmissions to OTP



Health Home Intake Process – Current OTP Patients



SUCCESSES, CHALLENGES, AND LESSONS LEARNED

Implementation

For providers, one of the most challenging aspects of the start-up phase of the health home was the short time frame between the approval of the State Plan Amendment and the notice to community providers that the health home would be funded and applications were due. Two of the three OTP health homes had to hire externally to meet the health home staffing requirements, and the added expense of paying for staff salaries meant that the health home needed to begin seeing patients right away in order to offset the cost. Another challenge was the requirement of two encounters per member per month. OTPs found that there were health home participants who would have 20+ services in 1 month because their circumstances warranted it, making it difficult to make time to see the participants with less need for services. The challenge became ensuring that those with less need were still seen for two visits per month while finding the time to see the participants with extremely high need for services.

Additionally, there were no operational models for the health home. All of the published literature provided only conceptual models, which described key components but offered no guidance for implementing the health home at the provider level.

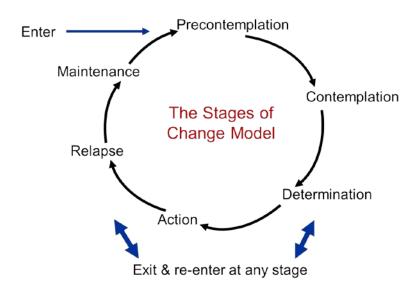
Integration

The OTP health homes used a phased-in approach to implementation. Initially, the health homes operated as stand-alone or add-on programs, where the newly hired health home director/nurse care manager was responsible for all aspects of health home enrollment/intake, provision of services, treatment planning, etc. The health home was viewed as a separate space in the organization. The primary reason that the health home was siloed in this way was concern about "double-dipping" with Medicaid because OTPs are reimbursed via a bundled rate. Programs

wanted to avoid inadvertently billing Medicaid for health home services that were included in the OTP bundled rate. Ultimately, the state defined the services OTPs should not provide to avoid any concerns about this and outlined a procedure that would permit OTP staff, particularly the counseling staff, to provide and document health home services. This removed the primary integration barrier and paved the way for the current model for the health home.

One of the most important aspects of integrating the health home into the OTP was the inclusion of all staff in the planning and discussions around the services offered and the benefits to the patient population. It is important to ensure that the health home is not seen as a separate program within the OTP, but as another service offered by all program staff and an integral part of the OTPs services. Another essential element to supporting integration is attention to the language used to describe and discuss the health home with staff and patients. The term health home should be used to describe the entire organization rather than a location or specific staff members. OTPs have observed that the nurse care managers are referred to as "the health home," which inadvertently reinforces siloes and slows integration.

Within the health home, OTPs need to take advantage of the skills the staff already have with regard to behavior change and the use of the Transtheoretical Model of Change and Motivational Interviewing. That model advises looking at the patient in a holistic manner, recognizing that behavior change is what addiction treatment encompasses in general, and using strategies for incremental change to assist patients at various stages of the decision-making process (Boston University School of Public Health, 2013).



Among staff, the buy-in to the health home model varies. How they view its value to the program, considering the additional work they have to do minus the work taken over by the nurse care manager, varies.

Initially there were challenges with integration of the multidisciplinary treatment plan and counselor documentation of services. In an agency where there were already many regulations on the timing and signatures required on a treatment plan, to add one more step seemed onerous and time consuming, but clearly it benefits the patient population and the delivery of care to have

a fully integrated treatment plan. Counseling staff initially balked at having to separately document a health home service; they were providing the services as a part of the regular counseling sessions, but not documenting separately so the service could be pulled out of the note for billing purposes. Now, all new staff are trained initially to document health home services separately.

The role of each team member must be clearly articulated to avoid siloing. Initially, some of the counselors remarked that they felt removed from their relationship with the patient because their patient sought all of their care from the medical team. This eventually stopped when all team members began providing health home services.

The location of the health home staff should be carefully considered, for example, placing the nurse care manager in a location easily accessible to patients and counseling staff. The health home staff should be integrated into the fabric of the clinic—certainly under one roof, and having them in the same area as the counseling staff affords quick and easy access and facilitates the warm handoffs that make it more likely the patient will take advantage of the service. One of the OTP's started with the health home staff on another floor in the medical area but moved the health home staff into the counseling area after it was discovered that the trip to another floor made it more likely the patient would decline the service if it were necessary to travel up one floor.

It would be helpful to have the state provide technical assistance up front and guide providers through the challenges of implementation. Answers to frequently asked questions were put out early and often in the initial stages, which was important and increased the providers' sense of efficacy with the implementation.

Staff/Hiring

Most of the new staff had a background in community/public health nursing and had a good awareness of available community resources and strong community connections; they also saw themselves as social justice advocates. Most OTPs did not utilize advertising to hire. Candidates were identified by word of mouth. Some advised that nurses who had only worked in hospital settings had the most challenges adapting to this model and that public health or primary care nurses were best adapted for this role. The nurse care manager and/or health home director should have a background in community/public health, through education and/or experience.

Partnerships

Learning Partnerships

In Maryland, the OTPs operating since October 2013, when the state rolled out the health home program, formed an OTP Health Home Learning Collaborative to provide a forum for health home staff, particularly, health home directors and nurse care managers, to share best practices and work through challenges. The OTPs also joined the Community Behavioral Health Association of Maryland (CBH), an organization that worked closely with the state/DHMH on implementation and served as a provider of technical assistance and a liaison with the state.

Additionally, CBH holds monthly meetings for all health home providers, including OTPs, PRPs, and MTPs.

Community Partnerships

Forming partnerships with care providers in the community is critical to success. One of the OTPs developed formal partnerships with a local university's school of nursing and school of public health, which connected them with students who would work with patients to provide one-on-one care, blood pressure screenings, and opioid overdose prevention training, as well as lead a panel discussion for nursing students and other health professionals countering prejudice about addiction treatment. In addition, the strengthened relationships with FQHCs in the community resulted in same-day medical and psychiatric appointments for some patients.

Information Sharing

Engagement with providers has been another challenge. OTPs either fax a care coordination letter with a request for medical records or write a care coordination letter with the patient and have the patient bring the letter to a doctor's appointment. Some providers have been very responsive, but others will not respond to requests for medical records.

Information Management

One of the key components of the health home is the population care management function. This involves looking at measures of health, such as BMI or blood pressure, or other determinants of health, such as access to a primary care provider, in order to design interventions that target the population-level health needs of the patient. The state-provided eMedicaid allows for running reports on diagnosis. EMedicaid also allows for tracking of other indicators, but there is no reporting function for them; therefore, OTPs rely on Excel spreadsheets to track patient data. That requires documentation in several locations, which is time consuming.

Financing

We recommend states provide grants for initial salary support, supplies, and national certification requirements to allow OTPs 3 months to plan and prepare for providing health home services.

Workforce Development

Providers receive support through the CBH Health Homes Committee. A designated contact at CBH responds to providers' questions and provides technical assistance. In-person trainings and webinars are provided through arrangements with Missouri Health Homes.

Participant Engagement

Most patients, when introduced to the health home and services, eagerly agree to participate. Most of those patients also complete intake activities. However, once enrolled, we have observed challenges with keeping patients engaged consistently. Inconsistent patient engagement presents challenges for the provision and billing of services, for supporting patients in their efforts to meet health goals, and for tracking health outcomes. DHMH requires that health homes report on specific social and health indicators every 6 months.

The OTPs participating in the health home are seeking new ways to improve participation and may consider new engagement strategies, such as working with Medicaid to offer transportation services to health home appointments and using text messages to remind patients of appointments. (One program found that patients would not answer the telephone—it uses up limited minutes—but would respond to a text, since texting is usually unlimited.) Having the nurse care manager "hang out" in the waiting room where patients enter to be medicated is another way to reach out to patients who may not be returning to meet with the nurse care manager, and having an office off the waiting room for a quick follow-up will increase the likelihood of seeing patients. Additionally, one program offers blood pressure screenings every month in the patient waiting room in an attempt to engage new enrollees and to follow up with current health home members. Health home staff and program staff need to be willing to reach out to patients through multiple channels and on an ongoing basis because one never knows when the patient will be receptive.

Another challenge is that patients have barriers that OTPs and the community have limited capacity to meet, particularly safe housing. Patients' housing situations are deeply interconnected with their ability to manage their health. OTP patients also face discrimination in various settings, including primary care physician offices, due to negative attitudes about addiction. Maryland health home OTPs have learned that it is difficult or impossible to provide effective care without working to challenge the internalized and external negativity faced by the patients.

Recommendations

The health home program presents a unique opportunity for OTPs to expand on the holistic, patient-centered care that they already provide while limiting the financial burden of additional staff. The 90-percent federal medical assistance percentages (FMAP) for the first 8 quarters also limit the state's costs while allowing early adopter OTPs time to pilot the health home program. Following are recommendation to states intending to create health homes.

- Identify stakeholders and include them in discussions and decision making. In Maryland this included:
 - Health home implementation led by the DHMH Medicaid Administration.
 - Consultation with the Substance Abuse and Mental Health Services Administration (SAMHSA).
 - The submission of a State Plan Amendment to the Centers for Medicare & Medicaid Services (CMS).
 - Coordination with Maryland's state-designated health information exchange and the state's information technology (IT) center for access to hospitalization and pharmacy data.
 - Coordination with Maryland's eMedicaid system for service data entry and payment invoicing.
 - Contracting with The Hilltop Institute, a nonpartisan health research organization with expertise in Medicaid, for data analysis and outcome reporting.

- Developing a an Advisory Council; a few months into the process, DHMH convened a Health Home Advisory Council which meets quarterly to discussed issues and includes includes representatives from the Medicaid Administration, Maryland's eMedicaid and IT departments, OTPs, PRPs, and BHA.
- Engage provider organizations in use of structured assessment tools to help the states and providers identify barriers to integration early. One is the Behavioral Health Integration Capacity Assessment tool: https://www.resourcesforintegratedcare.com/tool/bhica.
- Ensure that state OTP licensing regulations, health home regulations, and accrediting organization requirements are fully aligned.
- Develop technical assistance teams that work closely with OTPs to plan and implement their programs.
- Consider offering small grants to providers to offset the cost of hiring new staff and allow time for planning before enrolling participants.
- Although the state defines eligibility criteria, reimbursement model, staffing requirements, and enrollment process (opt-in/opt-out), the OTPs should be allowed substantial flexibility to decide how to operationalize the health home according to the values, needs, and goals of the organization.
- Develop an advisory council. A few months into the process, the Medicaid Administration convened a Health Home Advisory Council which meets quarterly to discuss issues and includes representatives from the Medicaid Administration, Maryland's eMedicaid and IT departments, and stakeholders from OTPs and PRPs.
- Identify stakeholders and get them involved early. Providers should consider forming an exploratory health home committee to conduct a needs assessment and engage in strategic planning. If the OTP decides to become a health home, then the committee can oversee the planning and implementation process. The Community Toolbox has excellent guides and toolkits to aid organizations in needs assessment, strategic planning, and program implementation and evaluation: http://ctb.ku.edu/en/table-of-contents.

References

Centers for Medicare and Medicaid Services. (n.d.). *Approved health home State Plan Amendments*. Retrieved from http://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-state-plan-amendments.html

Chang C. K., Hayes R. D., Perera, G., Broadbent, M. T., Fernandes, A. C., Lee, W. E., ... Stewart R. (2011). Life expectancy at birth for people with serious mental illness and other major disorders from a secondary mental health care case register in London. *PLoS One*, 6(5), e19590.

Craig, C., Eby, D., & Whittington, J. (2011). *Care coordination model: Better care at lower Cost for people with multiple health and social needs*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement. Retrieved from http://www.ihi.org/resources/Pages/IHIWhitePapers/IHICareCoordinationModelWhitePaper.asp

Maryland Department of Health and Mental Hygiene. (2015). *Health homes quarterly report: January to March 2015*. Retrieved from http://dhmh.maryland.gov/bhd/Documents/Q1%202015%20HH%20Report%205.27.15.pdf

Maryland Department of Health and Mental Hygiene. (2013). *Health home State Plan Amendment*. Retrieved from http://www.medicaid.gov/State-Resource-Center/Medicaid-State-Technical-Assistance/Downloads/Maryland-SPA-13-15.PDF

Moses, K., & Klebonis, J. (2015). *Designing Medicaid health homes for individuals with opioid dependency: Considerations for states*. Health Home Information Resource Center, Centers for Medicare & Medicaid Services. Retrieved from http://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-homes-technical-assistance/downloads/health-homes-for-opiod-dependency.pdf

National Drug Intelligence Center, U.S. Department of Justice. (2011). The Economic Impact of Illicit Drug Use on American Society. Retrieved from http://www.justice.gov/archive/ndic/pubs44/44731/44731p.pdf

Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. (2013). *National expenditures for mental health services & substance abuse treatment*, 1986–2009. Retrieved from http://store.samhsa.gov/shin/content/SMA13-4740.pdf

Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. (n.d.). *Opioid treatment program directory*. Retrieved from http://dpt2.samhsa.gov/treatment/directory.aspx

Integrated Service Delivery Models for Opioid Treatment Programs in an Era of Increasing Opioid Addiction, Health Reform, and Parity

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Introduction

This is the second of three policy papers that the American Association for the Treatment of Opioid Dependence (AATOD) has developed for the Substance Abuse and Mental Health Services Administration (SAMHSA) in the U.S. Department of Health and Human Services (HHS). The papers have a common theme, which is to provide a blueprint for more innovative and integrated service delivery, focusing on opioid treatment programs as comprehensive treatment hubs in the treatment of opioid addiction.

Opioid addiction treatment programs (OTPs) have operated in the United States since the 1960s. In 1972, through an act of Congress, OTPs became a close-paneled system of care. This congressional legislation bifurcated the regulatory oversight of OTPs between the Department of Justice's Drug Enforcement Administration (DEA) and HHS, initially through the Food and Drug Administration. HHS subsequently transferred the regulatory authority to SAMHSA in 2001. As a point of reference, treating heroin addiction with methadone maintenance treatment was stigmatized from the beginning. Mainstream medical practices did not demonstrate an interest in treating such patients, which led to the development of OTPs.

At the present time, there are approximately 1,400 OTPs in the United States, treating approximately 350,000 patients on any given day. These treatment programs operate in 48 states. The Drug Abuse Treatment Act of 2000 created a new access point for OTPs through private physician practices that would seek special waiver authority through SAMHSA, and receive a separate and distinct registration with the DEA, in order to provide patients with Schedule III, IV, V opioids to treat chronic opioid addiction.

We are currently operating in a period with the Affordable Care Act and the Mental Health Parity and Addiction Equity Act providing opportunities for more integrated care. There is also an increasing focus on the integration of service delivery, especially for patients who are opioid addicted and need an array of comprehensive treatment services, either offered through or connecting to other sites through case management and other managed care models of service delivery. Successful service integration provides a more coordinated level of care for the patients, as illustrated by the Vermont Hub and Spoke model. Additionally, such coordinated care models better address treating patients' multiple needs, including infectious disease and psychiatric co morbidity.

While service integration is an important component to improving patient care, as indicated above, it is important to underscore the protections afforded to patients receiving medication-assisted treatment (MAT) through 42 CFR. Part 2 in the Code of Federal Regulations. Illustratively, patients need to provide informed consent to their service providers as the field of addiction treatment works with other providers of primary and behavioral health care.

At the present time, OTPs are able to use all three federally approved medications in their treatment programs as they see fit based on the clinical needs of the patient. Based on SAMHSA data from the National Survey of Substance Abuse Treatment Services (NSSATS), the majority of such patients in OTPs receive methadone maintenance treatment. A smaller but increasing number are gaining access to the use of buprenorphine in OTPs. There have been several

impediments hindering the greater use of buprenorphine in OTPs. A significant impediment that still exists is the fact that the majority of states which do have Medicaid reimbursement benefits for Medicaid beneficiaries in OTPs still do not have any specific Medicaid reimbursement rate for the use of buprenorphine or extended release naltrexone products in the OTP setting. Several states are making progress, and the most recent example is New York, which recently implemented a buprenorphine reimbursement rate for Medicaid beneficiaries who are treated in OTPs. As readers may know, there are approximately 16 states that do not provide any Medicaid reimbursement for any of the three federally approved medications in OTPs.

The third medication that has been approved by the Food and Drug Administration (FDA) in 2010 to prevent relapse to opioid use is naltrexone (Vivitrol®). This is also a medication of interest to OTPs, and AATOD has recommended, as have other medical organizations, that such medications should be considered for use as a relapse prevention tool in OTPs at the very least. These organizations have also made such a recommendation as linkages will be created with other parts of the criminal justice system, notably drug courts, probation and parole authorities, and correctional facilities. In fact, these kinds of integrated care models with criminal justice will be covered in the third and last policy paper for SAMHSA and HHS.

The United States is also experiencing a major change in opioid use and misuse patterns. Such changes were captured in a recently published article in the New England Journal of Medicine (January 15, 2005), "Trends in Opioid Analgesic Abuse and Mortality in the United States." Dr. Richard Dart served as the lead author of the article, focusing on the data gathering work of the Denver Health and Hospital Authority through the Researched Abuse, Diversion, and Addiction-Related Surveillance (RADARS®) system. The article focused on such opioid analgesic misuse trends between 2002 and 2013. OTPs have learned a great deal about changing patient characteristics, especially when patients they admitted in 2005–2010 indicated a high rate of prescription opioid misuse. The southeastern corridor was particularly impacted by prescription opioid misuse, as reflected in the surveys submitted by patients in the participating programs in the southeastern states (Dart et al., 2015).

Multiple reports from various federal agencies and the RADARS[®] system have also shown that there has been a change from the use of prescription opioids, both legal and illicit, to the use of intravenous heroin. The northeastern corridor has been the most impacted region in the United States with regard to this trend. SAMHSA-published data indicate that approximately 80 percent of new heroin users had previously misused prescription opioids.

Clearly, there is a need for more integrated service delivery among OTPs, Drug Addiction Treatment Act of 2000 (DATA 2000) practices, and primary and behavioral health care settings. The two sections that comprise this policy paper were developed by Dr. Kenneth Stoller and Dr. Mary Ann Stephens of the Department of Psychiatry and Behavioral Sciences at Johns Hopkins University School of Medicine.

The second section was written by Allegra Schorr, who serves as the vice president of the West Midtown Medical Group, a comprehensive OTP primary care setting in New York City, in addition to serving as the president of the New York State Coalition of Medication-Assisted Treatment Providers and Advocates (COMPA). Each of these sections provide forward thinking

blueprints for how OTPs can work with other drug addiction treatment providers, especially DATA 2000 practices, and behavioral and primary health care settings.

The basic point of this paper is to offer OTPs models of integrated service delivery as a means of improving the care offered to their patients. There is an excellent history of providing guidance to OTPs in the United States with regard to improving the quality of treatment services. This dates back to when SAMHSA issued the first Treatment Improvement Protocol (TIP), State Methadone Treatment Guidelines, in 1993. These guidelines were subsequently updated in 2005 through TIP #43, Medication Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. SAMHSA took on the oversight responsibility from the FDA for all OTPs in 2001, using accreditation standards to guide treatment improvement for patients in care. Both the SAMHSA regulations, in addition to the TIPs referenced above, have been further bolstered by the recent release of SAMHSA's Federal Guidelines for Opioid Treatment Programs (March 2015).

It is hoped that the paper will stimulate active discussion among OTPs and their provider and policy collaborators, using these recommended service delivery models based on principles of effective integrated service delivery.

The Opioid Treatment Program as a Hub for Coordinated Care Kenneth B. Stoller, M.D., and Mary Ann C. Stephens, Ph.D.

BACKGROUND

A Public Health Emergency

Over the last 2 decades, opioid analgesic prescribing has increased fourfold. This increase has been accompanied by a dramatic rise in opioid-analgesic related misuse, hepatitis C virus (HCV) prevalence, and drug-related mortality. In 2013, opioid analgesics were involved in 16,235 overdose deaths, and heroin in 8,257 overdose deaths. This figure translates to about 67 deaths per day. Deaths involving heroin almost tripled from 2010 to 2013, while the rate involving opioid analgesics has been stable (Hedegaard et al., 2015). Nonfatal opioid overdoses have also dramatically increased in recent years. In 2011, there were 465,564 emergency department (ED) visits specifically related to misuse of prescription opioids, representing an increase of over 186 percent since 2004.

In the same year, there were 258,482 ED visits for heroin use, resulting in a combined average of over 1,800 opioid-use-related ED visits per day. Almost a quarter of these ED visits result in hospital admissions, yet only eight percent result in referral to treatment (SAMHSA, 2013). Treatment engagement typically relies on self-referral to community-based substance use disorder (SUD) treatment settings. The treatment offered is largely determined by the services provided by the specific program where the person presents. That treatment may or may not match the individual's needs.

People with opioid use disorder (OUD) typically benefit most from an integrated and comprehensive system of care. The most effective treatment delivers an array of services tailored to match the varying needs of the individual over time. By optimizing treatment outcome, the greatest public health benefit can be achieved.

A Complex Population, Broad Set of Needs

Treatment for SUD should be multifaceted. This is especially vital for individuals with OUD, due to high rates of co-occurring medical and psychiatric problems. If untreated, these problems are associated with significant morbidity and mortality, and they threaten public health, incur high cost, and hinder SUD treatment engagement. Persons with OUD are also likely to concurrently misuse other substances, including alcohol, cocaine, and sedatives/hypnotics. Social corollaries of severe SUD include deficits of basic necessities such as stable housing and employment. Additionally, job skills and access to transportation are often lacking.

All of these problems can be best addressed through individually tailored and extensive social support services. It can be difficult to find effective care coordination of the range and type of services necessary for optimal outcomes for persons with severe OUD. Providers of OUD treatment too often function in isolation from other sectors of health care. The result can be an overreliance on single elements of care (e.g., counseling or medication or supportive housing),

underutilization of pharmacotherapies, and elements/durations chosen out of convenience and adjusted infrequently.

Treatment Gap

In 2012, the number of persons with past year opioid misuse or dependence far outnumbered the availability of treatment slots (Jones, Campopiano, Baldwin, & McCance-Katz, 2015). A person with opioid use disorder, more so than with misuse of other substances, is likely to be physically dependent and will likely benefit from pharmacotherapies such as methadone, buprenorphine, or extended-release injectable naltrexone. Buprenorphine or naltrexone pharmacotherapy can also be provided in office-based settings.

Medication-assisted therapies (MAT) are well-established first-line elements of an evidence-based treatment approach to OUD. Yet, despite high demand, MAT is substantially underutilized (Kraus et al., 2011; Sigmon, 2015; Volkow et al., 2014). Moreover, the risk of premature treatment drop-out is high (Gryczynski et al., 2013; Pinto et al., 2010). More work is needed to increase access to OUD treatment and, once people are admitted to treatment, to engage and retain them while enhancing treatment effectiveness.

Access to treatment is limited by stigma, underserved geographical locations, underutilized medical settings, outdated service delivery structures, and funding restrictions. There is a reluctance to use MAT (buprenorphine, naltrexone) among general medical and psychiatric providers, and even among specialty SUD care providers. Even more troublesome is the reluctance of some SUD providers to accept patients already receiving MAT, especially methadone. The discomfort may stem from negative attitudes or prejudice against MAT, insufficient or inaccurate knowledge about MAT, inadequate reimbursement for MAT services, or a lack of resources needed to provide or support MAT.

Reimbursement for the full complement of treatment strategies, especially for provision of methadone-based services, is lacking across many states and across public and private payers. Public policy decisions, such as moratoria on new OTPs or maximum treatment duration mandates, sometimes limit treatment access. Also, judges sometimes impose prohibition of MAT for probationers or individuals in drug court.

Another contributor to the treatment gap is the lack of basic social necessities among the OUD population. Treatment entry and engagement is difficult without stable housing, employment, daycare, or transportation.

Finally, a lack of coordinated and comprehensive care across providers and agencies reduces the likelihood that individuals will receive the necessary services and supports to recover from SUD. This is a costly shortfall as it increases the likelihood of medical sequelae—for example, human immunodeficiency virus (HIV) or hepatitis—as well as avoidable emergency room visits, inpatient hospital admissions, and arrest/incarceration.

Opportunities: Capitalizing on Opioid Treatment Programs

Individuals with OUD often have more significant physical and behavioral health needs that result in high healthcare utilization and cost. States and the federal government are looking for

innovative, cost-effective ways to integrate and coordinate treatment for this high-need population. The aim is to assure access to a wide range of services, while improving the cost-effectiveness of care.

OTPs can be a key component in accomplishing these goals. OTPs can streamline the administration, coordination, and continuity of care, and thereby enhance treatment access, quality, and retention. OTPs have provided treatment to opioid-addicted patients for over 40 years. This has imparted a level of expertise and experience that has yet to be meaningfully tapped by the larger addiction, psychiatric, and general medical treatment community.

In 2013, there were 1297 OTPs nationwide that provided treatment, typically including methadone, to more than 330,000 individuals. The number of OTPs has increased, and there were approximately 1,400 SAMHSA-certified OTPs in 2015. OTPs offer a rich array of resources and expertise that are not typically available in office-based practices. They provide a setting where complex co-occurring problems can be managed.

OTPs are open 6 or 7 days per week to provide medication, counseling, and other daily services for patients. With these broad hours of operation and observed medication dosing, clinical contacts with staff are frequent. This is particularly the case early in treatment and during periods of relative instability, when unobserved dosing is limited. Frequent visits can facilitate patient retention and engagement, allow for staff to motivate behavioral change, and provide case management.

Behavioral contingencies that tie together medication, psychosocial, and behavioral interventions can also enhance adherence to treatment. Motivated stepped-care (MSC) (Brooner et al., 2004) is an example of an adaptive treatment model that has been proven effective and is now considered a gold standard in OTP treatment (King & Brooner, 2008). MSC delivers opioid treatment services that match the intensity of counseling services to each patient's clinical progress and reinforce counseling attendance. This model improves both counseling attendance and drug abstinence.

OTPs are uniquely mandated to include medical staffing and infrastructure (program physicians, medical director, nurses, mandated physical exams, and accreditation standards requiring programs to address mental health needs). This structure promotes close collaboration with medical and psychiatric providers. OTP clinical staff can be trained to perform motivational interviewing and to have basic knowledge about common medical and psychiatric problems. Close collaboration with other providers can transform OTPs into specialized agents of health behavior change, and it helps support the efforts of primary care and mental health providers.

Collaboration also leverages the unique setting and structure of OTPs so they may serve a key role in an integrated and coordinated health care delivery system. The integrated care system is especially relevant in the context of health reform, which increasingly applies principles of population health to address our nation's most pressing health needs. OTPs across the nation can serve as hub sites of treatment and expertise that is both specialized and centralized in a modernized addiction treatment delivery system. Having OTPs in this role creates a referral and care coordination system with tendrils extending to DATA 2000 prescribers, primary care

providers, mental health providers, pain management and other medical specialists, hospitals, and even the criminal justice and social service systems.

PRINCIPLES TO FACILITATE COORDINATED CARE

There are several guiding principles to facilitate the adoption of new models, such as integrative care, involving OTPs as hubs. First and foremost, the OTP leadership, as well as leaders of other involved entities, must be supportive and engaged early in the process of change. OTP leadership should offer the opportunity for OTP staff to not only buy into the goals for these changes but also receive adequate training for any new or expanding roles. Resources such as the Providers' Clinical Support System for Opioid Therapies (PCSS-O, http://pcss-o.org/) and Providers' Clinical Support System for Medication Assisted Treatment (PCSS-MAT, http://pcssmat.org/) can be used to provide training and mentorship on evidence-based practices, helping staff to establish new competencies.

Successful coordination is also facilitated by designating a single point of contact to optimize referrals and communication in both the OTP and the collaborating entities. A cooperative teambased model of care should be adopted to minimize opportunities for maladaptive "splitting" of care providers by patients with co-occurring personality vulnerabilities. Open and ongoing verbal and electronic forms of communication are essential to integrated and coordinated care, especially between providers in dispersed locations.

It is also important that all parties recognize both intrinsic and extrinsic incentives for success and build models that align such incentives. For example, OTPs can benefit from linkages with primary care or psychiatric providers through resultant improvements in somatic and mental health among their patients, ease of access to these providers, and referrals from new sources. Likewise, medical and psychiatric practices benefit from coordinated care when their patients reduce drug use and associated risk behaviors and improve adherence to prescribed treatments. They also benefit from having access to expert consultation and mentorship through OTP clinical leadership regarding SUD treatment. The OTP's provision of case management services to some of their most needy and complex individuals is yet another benefit that providers collaborating with OTPs can anticipate.

INTEGRATED CARE OPPORTUNITIES INVOLVING OTPS

1. Coordination with Physicians Prescribing Buprenorphine (DATA 2000 Practices)

DATA 2000 permits physicians who receive specified training to treat OUD with buprenorphine. Office-based buprenorphine treatment is typically delivered via primary care or psychiatric settings. As of 2015, over 29,000 physicians had been DATA certified to prescribe buprenorphine. However, buprenorphine waivers have been underutilized (Volkow et al., 2014). For example, 53.4 percent of U.S. counties have no waivered physicians, and in rural counties that figure is 82.5 percent (Rosenblatt et al., 2015). Further, in a random sample of 545 waivered physicians, only 58 percent had prescribed buprenorphine (Kissin, McLeod, Sonnefeld, & Stanton, 2006). Physicians in that study cited induction logistics, poor compliance, and limited counseling availability as barriers to providing buprenorphine treatment. These barriers can

reinforce physician perception that effective treatment of SUD is, by nature, difficult and time-consuming, and always best left to specialized treatment programs.

Buprenorphine prescribers can greatly benefit from strengthened collaboration with OTPs. OTPs have the capability to dispense agonist medication on site during periods of clinical instability. OTPs can also provide counseling and wrap-around services to patients, including those receiving office-based buprenorphine in the community. This capability of OTPs to provide medication dispensing and intensive counseling when needed broadens the range of patients considered candidates for office-based treatment, especially for providers with little experience. It provides an intermittently necessary service for particularly complex patients. Strengthening such collaborative care for patients allows for the dynamic adjustment of the type, intensity, and setting of care, in addition to medication options, over time.

Vermont's Hub and Spoke Model

Coordinated care models have been developed from both top-down and bottom-up initiatives. Coordinated care models encourage uptake of MAT while also improving quality of care. For example, using a top-down approach, the State of Vermont has developed a regional comprehensive addiction treatment infrastructure described as a Hub and Spoke system that was implemented statewide

(http://www.healthvermont.gov/adap/documents/HUBSPOKEBriefingDocV122112.pdf).

Each center, or Hub, serves a geographic area and provides comprehensive addiction and mental health services to residents with OUD. In addition, these specialized centers assure the provision of integrated health care, recovery supports, and rehabilitative services in coordination with medication treatment and counseling. This model assures a "whole-person" approach to treatment of substance use disorders.

Less clinically complex patients who would benefit from MAT but are not best suited for methadone can receive treatment within the Spoke system. A Spoke comprises a designated provider (prescribing physician) and a team of collaborating health and addiction professionals who monitor adherence to treatment and coordinate access to recovery supports. They provide counseling, contingency management, and case management services. Spokes may consist of entities such as primary care medical homes, federally qualified health centers, physician practices, or specialty clinic-based outpatient mental health or SUD treatment providers.

The Hub and Spoke model is comprehensive, expansive, and standardized, but it may appear challenging to recreate in a larger state, or without top-down authority. Dissemination of this model seems most feasible in a smaller jurisdictional system, such as a county or an urban center.

Collaborative Opioid Prescribing Model

The Collaborative Opoid Prescribing (CoOP) model (Figure 1), a bottom-up care coordination model of care, has been developed at Johns Hopkins Hospital (Stoller, 2015). CoOP is an adaptive stepped-care model similar to MSC (described above), but it encompasses both internal (OTP) and external (DATA 2000 physician) providers. A CoOP model is easily designed, implemented, and maintained using a single OTP as a hub. It does not require larger systems

transformation as in the Vermont model. The model links primary care, psychiatric, or other office-based buprenorphine (OBB) sites with an OTP.

The goal of the CoOP model is to increase the availability, utilization, and efficacy of OBB maintenance. It does so through concurrent provision of OTP-based verbal therapies, collaborative stepped-care, wrap-around services, and expert consultation. The OTP can provide the initial comprehensive SUD assessment, and when buprenorphine maintenance is recommended, induct and stabilize the patient through its medication dispensary. The OTP also provides ongoing counseling. Once the patient is stabilized, buprenorphine provision shifts to prescriptions by the OBB site while verbal therapies continue at the specialized SUD treatment (OTP) site.

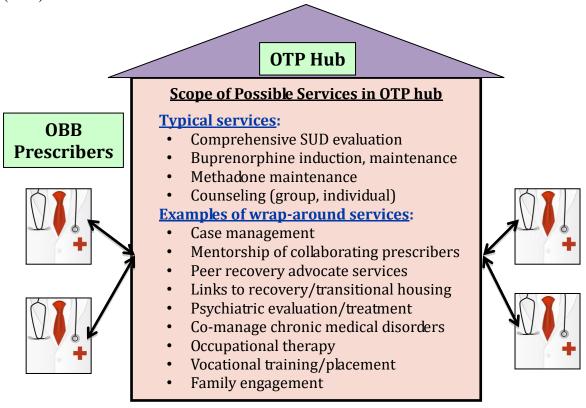


Figure 1. Collaborative Opioid Prescribing (CoOP) program model design developed and implemented at Johns Hopkins Hospital (Stoller, 2015)

An adaptive stepped-care model (Table 1) adjusts counseling intensity and medication prescribing and dispensing based on ongoing indicators of treatment response (e.g., toxicology screen results and percent counseling adherence). If there are indications of clinical destabilization (e.g., positive toxicology screen or decline in counseling adherence), counseling schedules can be intensified. When necessary, medication dispensing is shifted from the OBB to the OTP dispensary site. Conversely, as the patient stabilizes, counseling intensity is decreased and medication prescribing in the office-based setting is resumed.

Care is coordinated during the entire treatment episode through ongoing telephonic and electronic communication between the OTP staff and OBB providers. Patients ultimately not

responding to treatment can be offered a change in medication (e.g., to methadone) or setting (e.g., to residential care). This local, bottom-up approach fosters system creation that takes into account unique features of all participants and considerations—the patient served, the providers participating, and the local treatment system structure. The exact design of a CoOP model should be tailored to patients served, participating providers, and local reimbursement logistics.

Table 1. CoOP: A Multiprovider System for Buprenorphine Treatment (Example of an adaptive stepped-care model that may be used)

Step	Opioid Agonist Medication	Prescribing or Dispensing Location	Prescribing or Dispensing Frequency	OTP Counseling Intensity
1. Stable OBB	Buprenorphine	OBB prescription	1 month prescription	Low
2. Intensive OBB	Buprenorphine	OBB prescription	1 week prescription	Intensive
3. Intensive OTP	Buprenorphine	OTP dispensary	Daily dispensing	Intensive
4. Methadone OTP	Methadone	OTP dispensary	Daily dispensing	Intensive

Shaded cells indicate intensified treatment elements.

The CoOP model above, as implemented at the Johns Hopkins Hospital OTP and surrounding primary care providers, is one iteration of many possible collaborative models between OTPs and DATA-waivered physicians. It has demonstrated early success in increasing the number of physicians willing to obtain and use a buprenorphine waiver. Perhaps even more encouraging and impactful is the observation that in practice sites that precept medical residents, those physician trainees have completed the buprenorphine training course and appear to be very energized to provide buprenorphine as part of their future medical practices post-residency.

2. Coordinating with Primary Care Practices

OTP patients frequently have multiple chronic somatic health problems that are ignored or poorly managed, especially during periods of ongoing drug use. Successful treatment of substance use reduces the risk of contracting, and can slow the progression of, addiction-related medical diseases such as hepatitis and HIV. Adherence to medical treatments is improved when substance use declines.

Case management that is available in OTPs can address barriers to self-management of health problems, such as lack of transportation, unstable housing, and spotty insurance coverage. OTPs have the ability to provide directly observed therapy for medical conditions such as HIV, hepatitis, and tuberculosis exposure pharmacotherapy. Collaborative care by OTP nurses and other medical providers can enhance treatment of chronic medical conditions such as hypertension or diabetes, through clinical monitoring at the OTP.

While this sort of coordinated care is helpful, a fully integrated (e.g., co-located) medical service within the OTP would be ideal. An effective collaborative care model may serve as a step toward development of a more fully integrated, and even co-located, care system over time.

3. Coordinating with Psychiatric Providers

Co-occurrence of SUD and other psychiatric disorders among persons with OUD is exceedingly common. Addressing mental health conditions is paramount to treating SUDs. Elimination of substance use reduces the occurrence of episodes of severe mental illness and can prevent or delay development of more severe symptoms of mental illness, such as psychosis. Reduction in substance use also improves adherence to psychiatric treatment and thereby reduces the need for more intrusive, intense, and costly interventions, such as psychiatric hospitalization. Case management available in OTPs can complement treatment efforts in psychiatric practices by reducing or eliminating barriers related to transportation, poor housing, and lack of access to insurance.

The frequent, even daily, contact between OTP staff and patients can provide powerful support to psychiatric providers. It enables OTP staff to develop very productive, trusting relationships with the individual patient. OTP staff can thereby help monitor the patient's psychiatric symptomology and encourage adherence to the psychiatric providers' recommendations. Additionally, OTPs can provide directly observed therapy of psychopharmacologic agents, as well as deliver targeted therapeutic messages during routine encounters (e.g., self-efficacy, positive self-regard, use of effective coping skills, and the benefits of continued mental health care). This approach can improve engagement, retention, and efficacy of psychiatric treatment.

While this type of collaborative treatment is helpful, fully integrated (e.g., co-located) psychiatric evaluation and treatment within the OTP is ideal. The process of establishing collaborative care models may over time serve as a step toward development of a more fully integrated behavioral health care system within the OTP.

4. Coordinating with Specialty Medical Providers

Pain Treatment Providers

Co-occurrence of SUD and chronic pain is very common. Since approximately half of patients presenting to treatment for OUD report having started through misuse of prescription pain medications, the concurrent treatment of addiction and pain is essential. The OTP can serve as a source of expert addiction-related consultation to pain treatment clinicians. Also, the OTP can be utilized as a facility to refer their patients for evaluation and treatment when they begin to exhibit behavior concerning for misuse of prescribed medications. The OTP can detect, monitor, and treat co-occurring non-opiate SUDs.

Management of pain can be enhanced through refinements of the individual's treatment at the OTP. For example, by splitting the daily dose of methadone or buprenorphine dispensed through the OTP, a greater duration of analgesia coverage can be achieved. Dividing the opioid agonist dose into a two- to four-times-times-per-day regimen can avert the need to prescribe additional opioids (e.g., oxycodone) for "breakthrough" pain. Such medications can reinstate addiction

behaviors, as well as confuse the interpretation of routine toxicology testing. Through their relationship with pain treatment providers, OTP medical providers can develop proficiency in pain treatment approaches that present less risk of addiction/misuse.

The OTP can also assist the pain management physician through regular monitoring for problematic drug use and for medication diversion. This can be accomplished through toxicology testing, clinical observation, and episodic requirement to bring the prescribed medication in for counting. Effective management of chronic pain in addicted populations requires a multidisciplinary, team-based approach. The OTP team can play an important role when it functions as a hub of care coordination (Clark, Stoller, & Brooner, 2008; Dunn, Brooner, & Clark, 2014).

Obstetric Providers

Neonatal abstinence syndrome (NAS) is a constellation of signs and symptoms indicating autonomic, gastrointestinal, and respiratory system dysfunction that occur from intrauterine exposure to opioids such as heroin. NAS and other sequelae from SUD during pregnancy are associated with low birth weight, premature birth, and higher rates of mortality. Affected newborns have substantially longer neonatal intensive care unit stays, early childhood medical costs, and increased risk for developing problems than healthy newborns.

From 2000 to 2009, the incidence of NAS in the U.S. increased almost threefold and the incidence of maternal opioid use, almost fivefold (Patrick et al., 2012). Treating women who are identified as using opioids during pregnancy is thus a public health priority. However, treatment resources for pregnant women with SUDs in general, and especially for agonist maintenance for OUD, are scarce. Obstetric providers can play a critical role in improving access to OUD treatment for their patients.

Pregnant women with SUDs require enhanced specialized care to improve outcomes for mother and infant. Model programs include integrated, co-located obstetrics, SUD treatment, and other wrap-around services, such as temporary housing, psychiatric evaluation and treatment, parenting classes, and newborn pediatric care (Jansson et al., 1996). In some cases, onsite childcare and transportation may also be provided to facilitate attendance to counseling and medication appointments.

Obstetric practices often have limited access to important ancillary services that promote healthy birth outcomes in pregnant women with OUD. Moreover, obstetricians typically have little experience with buprenorphine induction. Pregnant and post-partum women with OUD also require appropriate pain management strategies that can be challenging for obstetricians who have limited time and experience to assess and treat OUD in their patients. Both methadone and buprenorphine improve maternal and fetal outcomes when moderate to severe OUD is present in the mother. Prenatal treatment with buprenorphine results in less severe NAS than with methadone (Jones, Finnegan, & Kaltenbach, 2012).

OTPs can develop ongoing collaborative relationships with nearby obstetric providers to fill a critical role by providing assistance with buprenorphine induction and maintenance through a collaborative model (such as CoOP, as above). Also, OTP staff can provide added services for

women during their pregnancy. In this way, access to and quality of OUD treatment for pregnant women can improve.

Infectious Disease Treatment Providers

The prevalence of HIV and hepatitis C virus (HCV) infections is to a large extent driven by injection opioid use. About 80 percent of people with HIV who inject drugs are also co-infected with HCV. HCV is now the most common blood-borne pathogen in the U.S. HCV infections increased 150 percent from 2010 to 2013, especially among young nonurban people with infectious disease, often in association with misuse of injected prescription-type opioids (Suryaprasad et al., 2014). As such, OTPs see a large percentage of HIV and HCV positive patients.

Collaboration with infectious disease treatment providers can improve the health status of these patients. Effective SUD treatment through the OTP, as well as educating patients regarding risk reduction strategies, decreases the risk of infecting others and slows the progression of the patient's own disease. Additionally, as the patient's recovery strengthens, adherence to prescribed pharmacotherapies for HIV or other infectious diseases improves. This is critical in the case of HIV and newer HCV pharmacotherapies, which require excellent adherence. Medication adherence can be virtually guaranteed through use of directly observed pharmacotherapy at the OTP's medication dispensary. Increasing the role of the OTP in the management of patients with infectious diseases, through support of the OTP as a hub of collaborative care, can be a powerful public health strategy that has been largely underutilized.

5. Collaborating With Payers

By supporting treatment of SUDs and other behavioral health conditions, payers can help their members improve general health behaviors. Effective SUD treatment, especially when coupled with psychoeducation regarding general health maintenance topics, can improve adherence to medication and attendance to medical services. It can also enhance compliance with preventative care recommendations, such as prescribed diet regimens, sleep hygiene, and exercise. Decreases in high-risk behaviors such as intravenous drug use mitigate risk for serious and often costly medical conditions, such as infectious hepatitis, HIV, or endocarditis.

A payer's care manager can be embedded in an OTP on a set (e.g., weekly) schedule, to facilitate direct contact with members being treated in the OTP and to collaborate face-to-face with OTP staff regarding health care needs/deficits. OTPs are well equipped to address the difficulties that payers face in locating and contacting members with SUD since they may present to the OTP multiple times per week. Collaboration between the payer and the OTP can optimize performance on various quality measure targets on which the payer is judged during accreditation reviews, such the Healthcare Effectiveness Data and Information Set (HEDIS). High patient regard for the value of care manager services embedded in a managed care organization can also improve patient regard for OTP program value and thereby increase engagement and retention.

6. Health Homes in Opioid Treatment Programs

The Affordable Care Act has enabled reimbursement for health home services in behavioral health care settings. The Medicaid health home state plan option (Affordable Care Act Section 2703) offers states a mechanism to promote integrated physical and behavioral health services. Certification for OTP-based health homes is now available through national accreditation bodies such as the Joint Commission (TJC) and the Commission on Accreditation of Rehabilitation Facilities (CARF). Health homes in the OTP setting provide a structure that fosters integrated medical care within the OTP, as well as productive collaborations with outside medical and psychiatric providers.

7. Hospital-based Opioid Treatment Programs

OTPs that are part of a hospital system present unique opportunities. Convenient pathways to facilitate OTP admission from more acute settings (e.g., inpatient units and EDs) foster engagement and treatment entry at a clinically critical time, when distress caused by acute health problems punctuate the need for SUD treatment. Hospital-based OTPs often share, or have convenient access to, hospital resources, including the hospital's electronic health record, clinics, laboratories, and pharmacies. These connections facilitate communication between the OTP and other service providers. They and also make it easier to embed within the OTP services such as psychiatric evaluation and treatment, basic medical services, directly observed therapy for HIV, occupational therapy, or integrated obstetrical care. When the hospital-based OTP is part of an academic health system, this can facilitate performance of high-quality clinical research on innovative treatment models that may have the potential for wider dissemination when proven effective.

For these reasons, the hospital-based OTP, especially when connected to an academic medical center, can serve as a "hub among hubs," delivering the most comprehensive treatment to individuals with particularly high levels of need. Such a program can serve as a resource for other nearby OTPs and can function as a center of clinical research.

8. Collaborating with Local and State Government, Regulatory Bodies, Policy Makers

Creating close collaborations between OTPs and their local and state oversight agencies can foster the identification of gaps between public health needs and resources. This can, in turn, lead to the development of policies, administrative supports, and delivery systems that address such gaps, creating a more "smart," effective, and efficient treatment system. Such close and dynamic associations can, over time, help dispel myths about MAT and thereby reduce negative attitudes regarding the population served and the treatments being offered. It can encourage the creation of laws, regulations, and policies that are based on well-established medical research rather than preconceived bias against MAT. Collaborating with these agencies can create innovative systems such as Vermont's Hub and Spoke model or behavioral health homes within the OTP (both described above).

9. Functional Linkage Between Substance Use Disorder Providers

OTPs can coordinate within a local jurisdiction (such as county and city health departments) to transform what was an unrelated group of OTPs and other SUD treatment providers into a synergistic and highly effective system of care. Sharing of resources and referrals of patients

between treatment and recovery support providers can create a well-coordinated network, better able to match patients to services based on clinical and social needs. The system could function to dynamically assign and adjust treatment modality, setting, and intensity to each individual's needs by cross-referral to providers that best match those needs over time.

10. Improving Access to Community-Based Recovery Support Services

Although a community's social services and recovery resources may be vast, they are often underutilized by patients in OTPs, who are a vulnerable population perhaps most in need of such services. Underutilization may also be related to poor communication regarding what services are locally available. However, prejudice against MAT among service providers is another barrier OTP patients encounter in the community. Creating forums for information dissemination, with OTP participation, can help community-based social and recovery support providers learn more about treatments for SUD, including pharmacotherapies. Likewise, OTPs can be informed about community resources within reach of its patients.

Through such efforts, OTPs can create productive collaborations with housing agencies, social services, vocational or psychosocial rehabilitation, family resource centers, and the spiritual community. Potential for particularly fruitful collaboration can be formalized through memoranda of understanding and even by embedding staff from such entities within the OTP premises on some regular schedule.

11. Telemedicine and Mobile Technology

As technology continues to advance, OTPs can help facilitate and coordinate the use of effective telecommunication tools in medical and behavioral health care delivery. Telemedicine seeks to improve a patient's health by permitting two-way (or group-based), real-time interactive communication between the patient and the practitioner at a distant site through use of interactive audio and video telecommunications equipment.

Telemedicine can play an essential role in implementing integrated models of care, particularly in less populated areas where OTPs and other treatment providers are geographically dispersed, and in serving patients who have limited transportation or mobility. It provides a cost-effective alternative to face-to-face communications when the latter is impractical. Telemedicine may be particularly helpful in rural areas where the expertise and basic counseling resources of the OTP would be beneficial, but where there is no OTP physically located. States should consider allowing reimbursement for telemedicine under Medicaid.

Similarly, mobile applications ("apps") are innovative and highly accepted tools that have the potential to deliver behavioral change interventions within the context of integrated care models. Mobile applications can track and monitor behaviors among OTP patients, reminding patients to take medications and reporting mood symptoms and proximity to high-risk localities. They can collect useful data about patient behaviors that help them self-manage their health care and deliver consistent quantitative information to primary and behavioral health care providers for better integration and collaboration in medical decision making.

ADDRESSING BARRIERS TO OTP-BASED COLLABORATIVE MODELS

To establish and foster collaboration between OTPs and other entities, concrete recommendations are offered to address institutional barriers that often impede coordination of care:

- Government and treatment advocacy groups must make strong efforts to eradicate stigma through educating the public, policy makers, treatment providers, service agencies, payers, and the criminal justice system about MAT, OTPs, and the efficacy of treatment.
- OTP leadership must recognize opportunities created by collaborative care and reach out to engage health care providers, recovery support service entities, and governmental/regulatory bodies, to conceive and implement collaborative relationships and systems of care.
- In many states, the lack of Medicaid coverage for a full complement of addiction treatment, especially methadone-based treatment within OTPs, is an insurmountable barrier to providing treatment access and to implementing these collaborative models of care. This situation must be remedied.
- Likewise, the lack of Medicare coverage for OTP services precludes the widespread use of these coordinated care models. Such systems of care would be particularly useful to an aging opioid-addicted population with multiple medical morbidities. This situation too must be remedied.
- OTPs must become more flexible by offering and billing for counseling when patients are not receiving MAT (methadone or buprenorphine) in the clinic. Doing this allows patients to remain concurrently enrolled in the OTP even when medications are being provided in an office setting (as in the CoOP model).
- Provider payment for time spent in care coordination activities is typically not allowed.
 Reimbursement models for care coordination should be implemented to encourage the development and utilization of collaborative models of care.
- Integrating outcomes research (e.g., through federal funding mechanisms) can help establish which models of coordinated care are most effective for which populations and determine the economic impact on the health care system. Such research should be encouraged and supported.

SUMMARY

Persons with OUD often have complex treatment needs that require concurrent and coordinated attention to addiction, medical, psychiatric, and social problems. OUD patients do best when they have access to a full range of MAT options in a variety of settings. They can benefit from assistance in locating and navigating an array of social and recovery support services.

OTPs can fill a critical need for expert and efficient management of OUD treatment. With over 4 decades of experience and related medical research, OTPs provide multidisciplinary and comprehensive services, including the potential for a full range of pharmacotherapies for opioid

and other SUDs. OTPs offer a treatment setting that allows for frequent patient contact with staff who come to know the patient and the patient's individual needs particularly well. In many cases, the OTP serves as the greatest, or only, source of stability in the patient's life. These qualities impart the OTP with the ability to coordinate care among other health care providers and recovery support agencies. OTPs can also help other providers take better care of patients they serve by facilitating comprehensive treatment services, including counseling and care management. OTP staff can make their expertise accessible to others by providing guidance and support to providers outside the OTP setting.

Such productive connections with other care providers can also enhance the OTP's clinical outcomes by providing a broader spectrum of services for its patients. These service enhancements include OBB treatment and improved access to community resources and medical providers. Fostering these relationships also establishes referral sources of new patients into OTP-based services, patients who otherwise may not have found their way to an SUD treatment setting.

Patients, providers, governments, and payers can all benefit from models of coordinated care through OTPs. When the OTP functions as a hub and coordinates with primary care providers, OTP staff can help the patient progress on treatment plan goals related to somatic health. Additionally, the physician who is given the support and access to counseling the OTP provides may become more comfortable prescribing buprenorphine or naltrexone. This benefits the patient, who receives more effective somatic and SUD treatment. It also benefits the community, as more physicians become willing to provide OBB to more patients. As treatment access, engagement, and effectiveness progress, population health status improves and healthcare costs decline. This is extremely desirable from the perspective of agencies responsible for improving public health and controlling health care expenditures. Strong governmental advocacy is critical in order to achieve these "win—win" scenarios.

This paper asserts that OTPs have the expertise and infrastructure to centralize many core elements of engaging patients and implementing an integrated and coordinated approach for treating OUD. OTPs are in a central position of managing patient care while facilitating access to other treatment services.

Implementation requires organizational changes that value collaboration and that provide new competencies. Within the context of health reform, the Affordable Care Act provides a range of resources to assist states with this transformational change. Each state will choose to implement these changes differently; however, this paper provides some examples of statewide (Vermont) and local (CoOP) implementation of innovative models.

With opioid use on the rise, the field is primed to design, implement and evaluate collaborative care models focused around the OTP. Further implementation of the Affordable Care Act will help address barriers to treatment access, making collaborative care models more conceivable. The climate for healthcare delivery has become ideal for mobilizing resources that can help implement and improve treatment innovations. Through this process, treatment for individuals with OUD can become more accessible and effective, health outcomes will improve, and mortality can begin to decline.

Recommended Resources

Integrating primary and behavioral health services

- SAMHSA-HRSA Center for Integrated Health Solutions
 - http://www.integration.samhsa.gov/
- Agency for Healthcare Research and Quality— The Academy: Integrating Behavioral Health and Primary Care
 - http://integrationacademy.ahrq.gov/
- Centers for Medicare & Medicaid Services (CMS)—The CMS Innovation Center
 - http://innovation.cms.gov/
- Center for Health Care Strategies—Integrated Services for People with Complex Needs
 - http://www.chcs.org/focus area/integrated-care-for-people-with-complex-needs/

Other TIPs and SAMHSA Center for Substance Abuse Treatment (CSAT) documents

- Medicare Coverage and Financing of Medications to Treat Alcohol and Opioid Use Disorders
 - http://store.samhsa.gov/product/Medicaid-Coverage-and-Financing-of-Medications-to-Treat-Alcohol-and-Opioid-Use-Disorders/SMA14-4854
- Federal Guidelines for Opioid Treatment Programs
 - http://store.samhsa.gov/product/Federal-Guidelines-for-Opioid-Treatment-Programs/PEP15-FEDGUIDEOTP
- Managing Chronic Pain in Adults With or in Recovery From Substance Use Disorders
 - KAP Keys for Clinicians: http://store.samhsa.gov/product/Managing-Chronic-Pain-in-Adults-With-or-in-Recovery-From-Substance-Use-Disorders/SMA13-4785
 - Quick Guide for Clinicians: http://store.samhsa.gov/product/Managing-Chronic-Pain-in-Adults-With-or-in-Recovery-From-Substance-Use-Disorders/SMA13-4792

Training

- PCSS-MAT—Providers' Clinical Support System for Medication Assisted Treatment
 http://pcssmat.org/
- PCSS-O—Providers' Clinical Support System for Opioid Therapies
 - http://pcss-o.org/
- AATOD—Hepatitis Education for Opioid Treatment Providers
 - http://www.aatod.org/projectseducational-training/hepatitis-c/
- SAMHSA—Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs: Inservice Training Based on TIP 43
 - http://store.samhsa.gov/product/Medication-Assisted-Treatment-for-Opioid-Addiction-in-Opioid-Treatment-Programs/SMA09-4341

Funding opportunities for innovative care delivery systems

- SAMHSA/CSAT Grants
 - http://www.samhsa.gov/grants

- Federal Grant Opportunities
 - Grants.gov: http://www.grants.gov/
 - CMS State Innovation Models Initiative: http://innovation.cms.gov/initiatives/state-innovations/
- The Commonwealth Fund
 - http://www.commonwealthfund.org/grants-and-fellowships/programs

National provider associations and local chapters/organizations

- American Association for the Treatment of Opioid Dependence (AATOD)
 - http://www.aatod.org/
 - Useful Links: http://www.aatod.org/home/useful-links/
- American Academy of Addiction Psychiatry (AAAP)
 - http://www.aaap.org/
 - Practitioner Resources/Area Resources: http://www.aaap.org/practitioner-resources/
- American Society of Addiction Medicine (ASAM)
 - http://www.asam.org/
 - Membership/State Chapters: http://www.asam.org/membership/state-chapters
- AcademyHealth
 - http://www.academyhealth.org/index.cfm

References

- Brooner, R. K., Kidorf, M. S., King, V. L., Stoller, K. B., Neufeld, K. J., & Kolodner, K. (2007.) Comparing adaptive stepped care and monetary-based voucher interventions for opioid dependence. *Drug and Alcohol Dependence*, 88(Suppl 2), S14–23.
- Brooner, R. K., Kidorf, M. S., King, V. L., Stoller, K. B., Peirce, J. M., Bigelow, G. E., & Kolodner, K. (2004). Behavioral contingencies improve counseling attendance in an adaptive treatment model. *Journal of Substance Abuse Treatment*, 27(3), 223–232.
- Clark, M. R., Stoller, K. B., & Brooner, R. K. (2008). Assessment and management of chronic pain in individuals seeking treatment for opioid dependence disorder. *Canadian Journal of Psychiatry*, *53*(8), 496–508.
- Dart, R. C., Surratt, H. L., Cicero, T. J., Parrino, M. W., Severtson, S. G., Bucher-Bartelson, B., & Green, J. L. (2015). Trends in opioid analgesic abuse and mortality in the United States. *New England Journal of Medicine*, *372*(3), 241–248.
- Dunn, K. E., Brooner, R. K., & Clark, M. R. (2014). Severity and interference of chronic pain in methadone-maintained outpatients. *Pain Medicine*, *15*(9), 1540–1548.
- Gryczynski, J., Mitchell, S. G., Jaffe, J. H., Kelly, S. M., Myers, C. P., O'Grady, K. E., ... Schwartz, R. P. (2013). Retention in methadone and buprenorphine treatment among African Americans. *Journal of Substance Abuse Treatment*, 45(3), 287–292.
- Hedegaard, H., Chen, L. H., & Warner, M. (2015). *Drug poisoning deaths involving heroin: United States*, 2000-2013. Hyattsville, MD: National Center for Health Statistics.
- Jansson, L. M., Svikis, D., Lee, J., Paluzzi, P., Rutigliano, P., & Hackerman, F. (1996). Pregnancy and addiction. A comprehensive care model. *Journal of Substance Abuse Treatment*, 13(4), 321–329.
- Jones, C. M., Campopiano, M., Baldwin, G., & McCance-Katz, E. (2015). National and state treatment need and capacity for opioid agonist medication-assisted treatment. *American Journal of Public Health*, 105(8), e55–63.
- Jones, H., Finnegan, L., & Kaltenbach, K. (2012). Methadone and buprenorphine for the management of opioid dependence in pregnancy. *Drugs*, 72(6), 747–757.
- King, V. L., & Brooner, R. K. (2008). Improving treatment engagement in opioid-dependent outpatients with a motivated stepped-care adaptive treatment model. *Joint Commission Journal on Quality and Patient Safety*, 34(4), 209–213.

- Kissin, W., McLeod, C., Sonnefeld, J., & Stanton, A. (2006). Experiences of a national sample of qualified addiction specialists who have and have not prescribed buprenorphine for opioid dependence. *Journal of Addictive Diseases*, 25(4), 91–103.
- Kraus, M. L., Alford, D. P., Kotz, M. M., Levounis, P., Mandell, T.W., Meyer, M., ... Wyatt, S. A. (2011). Statement of the American Society of Addiction Medicine Consensus Panel on the use of buprenorphine in office-based treatment of opioid addiction. *Journal of Addiction Medicine*, *5*(4), 254–263.
- Patrick, S. W., Schumacher, R. E., Benneyworth, B. D., Krans, E. E., McAllister, J. M., & Davis, M. M. (2012). Neonatal abstinence syndrome and associated health care expenditures: United States, 2000-2009. *JAMA*, 307(18), 1934–1940.
- Pinto, H., Maskrey, V., Swift, L., Rumball, D., Wagle, A., & Holland, R. (2010). The SUMMIT trial: A field comparison of buprenorphine versus methadone maintenance treatment. *Journal of Substance Abuse Treatment*, 39(4), 340–352.
- Rosenblatt, R. A., Andrilla, C. H., Catlin, M., & Larson, E. H. (2015). Geographic and specialty distribution of US physicians trained to treat opioid use disorder. *Annals of Family Medicine*, 13(1), 23–26.
- Sigmon, S. C. (2015). The untapped potential of office-based buprenorphine treatment. *JAMA Psychiatry*, 72(4), 395–396.
- Stoller, K. B. (2015). A collaborative opioid prescribing (CoOP) model linking opioid treatment programs with office-based buprenorphine providers. *Addiction Science & Clinical Practice*, *10*(Suppl 1), A63.
- Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. (2013). *Drug Abuse Warning Network, 2011: Selected tables of national estimates of drug-related emergency department visits*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Suryaprasad, A. G., White, J. Z., Xu, F., Eichler, B. A., Hamilton, J., Patel, A., ... Holmberg, S. D. (2014). Emerging epidemic of hepatitis C virus infections among young nonurban persons who inject drugs in the United States, 2006-2012. *Clinical Infectious Diseases*, *59*(10), 1411–1419.
- Volkow, N. D., Frieden, T. R., Hyde, P. S., & Cha, S. S. (2014). Medication-assisted therapies—tackling the opioid-overdose epidemic. *New England Journal of Medicine*, *370*(22), 2063–2066.

Opioid Treatment Programs and New York's Medicaid Redesign Allegra Schorr

New York State is actively transforming its health care delivery system. The state has the largest Medicaid program in the country, spends more than twice the national average on Medicaid per capita, and ranks 50th among all states for avoidable hospital use and costs (Rodin & Meyer, 2014). In 2011, New York created a Medicaid Redesign Team whose vision for reform embraces the "Triple Aim" of improving experience, improving health, and reducing per capita cost.

In order to achieve these goals, innovation and new models of care are needed. New York's multiyear action plan—*Better Health, Better Care, Lower Costs*—aims for "improving health by addressing root causes of poor health e.g., poor nutrition, physical inactivity, and *substance use disorders*[emphasis added]." It states: "In particular, the biggest problem with the state's health care system is that it is not successful in ensuring that complex, high-cost populations obtain the coordinated care they require" (New York State Department of Health, n.d.-c).

The complex, high-utilization populations that significantly impact the cost of the health care system in New York through avoidable hospitalizations and use of the EDs are those with behavioral health disorders. The presence of drug and alcohol disorders or mental illness is associated with higher per capita costs and hospitalization rates (Boyd et al., 2010). Individuals with SUD are among the highest-risk populations for medical rehospitalizations and are often underdiagnosed at initial hospitalization (Irmiter, Barry, Cohen, & Blow, 2009).

In New York, success in restructuring the health care delivery system will hinge on coordinating and integrating the care of behavioral health care patients who suffer with comorbid physical health conditions and chronic illness. An innovative care model envisioned to achieve this coordination is a behavioral health care site with fully integrated, co-located primary health care.

New York's OTPs are in a unique position to provide this innovative model of integrated behavioral health and primary care. OTPs are able to respond to the needs of high-risk, high-cost patients whom they successfully treat daily. These patients receive and have managed medication for their OUD, along with comprehensive individual and group counseling (at admission and thereafter), annual physical examinations, physical health care, and additional supportive services. OTP patients return to their programs up to 6 days a week, depending on their time and progress in treatment. This frequent contact combined with the established multidisciplinary team collaborative model used by OTPs, is a powerful tool available for preventive primary care. In fact, it is a proven and tested combination that has had impressive results when used in combating HIV.

The OTPs have the infrastructure, expertise, staffing, and relationships to treat patients in a fully integrated behavioral and primary health care model. The patients will benefit from both

improved quality and improved health, and the savings to the health care system are incalculable. The goal of integrating care and pursuing the Triple Aim can be achieved in the OTPs.

Achieving the Triple Aim

In their well-known article, *The Triple Aim: Care, Health, And Cost*, Berwick, Nolan, & Whittington (2008) explain that the pursuit of the Triple Aim requires preconditions and that the organization responsible for integrating care must include five components in order to ensure success:

Improving the U.S. health care system requires simultaneous pursuit of three aims: improving the experience of care, improving the health of populations, and reducing per capita costs of health care. Preconditions for this include the enrollment of an identified population, a commitment to universality for its members, and the existence of an organization (an "integrator") that accepts responsibility for all three aims for that population. The integrator's role includes at least five components: partnership with individuals and families, redesign of primary care, population health management, financial management, and macro system integration.

The remaining barriers to integrated care are not technical; they are political.

Prerequisites for the Triple Aim, then, are an identified population, a commitment to universality, and the existence of an organization/integrator. By fully integrating primary care into the OTPs, all three preconditions are met.

The Opioid Treatment Program Population

The patients at greatest risk for repeated hospitalizations and the highest cost to the health care system are the patients who match the demographic of the patients that are currently treated at OTPs.

The opioid epidemic and growing use of heroin have begun to change the picture of an opioid dependent individual in the public's vision. The epidemic is centered on prescription opioid misuse, which has fueled an alarming increase in heroin use. New York OTPs have seen an increase in patients seeking treatment as a result of this epidemic. There is also a population of long-term heroin-injecting users who are severely addicted being treated by OTPs for multiple disorders.

In 2011, the New York State Health Foundation's *Chronic Illness Demonstration Project* concluded its study of improvements in managing chronic illness. The study analyzed the state's Medicaid data to identify high-cost fee-for-service (unmanaged care) patients who were at high risk for hospitalization. The data (New York State Health Foundation, 2011) showed that:

- 76 percent had a history of chronic disease.
- 52 percent had multiple chronic diseases.
- 73 percent had a history of alcohol/substance use.
- 69 percent had a history of mental illness.

- 54 percent had a history of both alcohol/substance use and mental illness.
- 28 percent had had no primary care or specialty care use in the prior 12 months.

The 2012–2013 New York City patient data on admission to the OTPs showed:

- 25 to 78 percent of clients with high dysfunction.
- 18 to <u>85</u> percent of admissions for mental illness and chemical abuse (MICA).
- 9 to 88 percent of clients with other major physical health conditions.
- 1 to 52 percent of clients who were homeless at admission.
- 68 to <u>100</u> percent of clients with prior treatment history.
- 4 to <u>63</u> percent of clients with criminal justice involvement.

The prevalence of comorbid health conditions among opioid dependent individuals is well established and can be seen throughout the nation. Illinois notes two or more of the following conditions in 50–90 percent in its patient population: diabetes, hypertension, high cholesterol, obesity, psychiatric disorders, nicotine dependence, chronic obstructive pulmonary disease, and asthma (Mahoney, 2013).

Patients with a history of long-term opiate misuse may present with hepatitis C, HIV or acquired immune deficiency syndrome (AIDS), lung complications, soft tissue infections, abscesses, collapsed veins, and co-occurring mental health disorders. Furthermore, many opiate-dependent individuals face severe social barriers to positive outcomes and better health. Homelessness or lack of permanent housing, illiteracy or inadequate education, and lack of social supports are some of the enormous barriers that many OTP patients face.

Many OTP patients enter treatment with far less severe presentation, or they may have progressed through treatment. Considering a "phased approach" (see TIP 43) to treatment, most OTPs will have patients enrolled in treatment with a range of severity (Center for Substance Abuse Treatment, 2005). This integrated model of primary care focuses on the high-risk, high-cost Medicaid population.

Chronic, long-term use of opiates and heroin leads to devastating medical complications.

The Opioid Treatment Program Organization/Integrator

The FDA has approved three medications for the treatment of opioid dependence: methadone, buprenorphine, and naltrexone. All three medications are available through the OTP system. As indicated in the introduction, methadone maintenance is the most utilized of the three federally approved medications in OTPs. Buprenorphine use is increasing, but there continue to be reimbursement-related challenges, impeding a broader utilization of both buprenorphine and naltrexone/Vivitrol® products through OTPs. Opioid dependence is a chronic relapsing condition that alters the structure of the brain. Medication combined with a comprehensive approach to treatment (MAT) has proven successful in the treatment of opioid dependence.

OTPs are highly regulated and must be registered with the DEA, certified by the HHS SAMHSA, and licensed by the New York State Office of Alcoholism and Substance Abuse Services (OASAS). CARF, TJC, or the Council on Accreditation nationally accredits OTPs.

OTP patients are seen in an outpatient setting, with the lowest costs per successful outcome (Barnett & Hui, 2000).

OTP patients are mandated to receive a full physical examination within one week of admission, which is repeated annually. OTPs are required to have a medical director and registered nurse on staff and frequently have mid-level practitioners as well as additional staff in their medical departments. The qualifications of the medical director include either a subspecialty board certification in addiction psychiatry from the American Board of Medical Specialties, an addiction certification from ASAM, a certification by the American Board of Addiction Medicine, or a subspecialty board certification in addiction medicine from the American Osteopathic Association. As such, OTP medical directors are highly qualified in New York State, with years of specialized training and experience.

New York regulations for OTPs also specify additional physician, mid-level practitioner, and nursing hours based on the number of patients treated. They require OTPs to be equipped with the necessary exam rooms and equipment to perform the required exams, and they require the medical team to coordinate care with the patient's counselor and nursing. OTPs are using health homes to provide care coordination services for eligible patients and some OTPs are becoming certified as health home care coordinators.

As part of a comprehensive treatment plan, and in compliance with federal and state regulations, methadone patients receive daily doses of medication at the program, with take-home medication given over time as a patient stabilizes and meets criteria for receiving it. OTPs have frequent, often daily, contact with the most severely addicted OTP patients. This contact and the relationships developed between the patient and the OTP multidisciplinary team of providers creates a unique environment to engage the patient and respond to the individual's needs. The medical staff at the OTP is aware of the OTP patient's addiction and physical health and is in a unique position to care for both.

Providing primary care in an OTP setting is an opportunity to provide care that is fully integrated, co-located, and continuous.

Physical Health Care in Opioid Treatment Programs

Currently, New York State's Medicaid reimbursement system—the Ambulatory Patient Groups (APGs) payment methodology—allows the OTP medical staff to treat and bill for the physical health care needs of OTP patients. Physical health care is intended for urgent care only. The billing and clinical guidance for physical health care visits clearly intends for patients to be referred to a primary care provider for ongoing care. Furthermore, an OTP is limited to submit no more than five percent of its total program billing for physical health care.

Adding physical health care within the OTPs was an important and logical first step toward a new model of care. These additional services take advantage of existing medical staff and services that were ready and available in OTPs, building on the opportunity from the physical exams that are required by both state and federal regulations. Patients receive care, and New York State prevents costly emergency room visits, while OTPs use existing staff and infrastructure.

According to guidance provided by the New York State Office of Alcoholism & Substance Abuse Services (2013):

Many patients admitted to chemical dependency treatment have significant medical problems associated with their use of substances and lifestyle. Many of these patients are not aware of acute or chronic health problems and are not connected to a primary care provider. Medical staff in chemical dependency programs can assess and treat a wide variety of addiction related acute and chronic conditions and receive reimbursement through Medicaid. Patients must be seen directly by the medical staff performing and billing for the service and the program should attempt to link patients to a primary care provider for ongoing care, if the patient does not have a primary care provider.

The challenge is that many OTP patients have been passively enrolled to primary care providers they do not know and rarely see, despite the urging of care coordinators, counselors, and OTP medical providers and staff. To quote the guidance, "Many of these patients are not aware of acute or chronic health problems and are not connected to a primary care provider." When patients are seeking medical care, they look for it in their OTP programs, which they often visit several times a week for medication purposes. It is natural and wise to seek care through the medical providers and staff in the OTP who are well acquainted with the patient and can provide continuity of care. The "partnership" between provider/integrator and individual already exists.

There are several studies, which specifically address the benefits of providing primary care in the OTP setting. The benefits include reduced hospitalizations (Laine, et al., 2001), reduced ED and hospital services (Friedmann, et al. 2006), and significantly reduced costs for integrated care for patients with medical conditions related to substance use (Parthasarathy, Mertens, Moore, & Weisner, 2003).

The Background of OTPs and Primary Care

The majority of OTPs in New York State are also licensed by the New York State Department of Health as diagnostic and treatment centers under Article 28 of the Public Health Law. These clinics are certified to provide primary care and have undergone a rigorous certificate of need process and inspection. These Article 28 diagnostic and treatment center OTPs are primary care providers; however, they are NOT designated as the official primary care provider for their OTP patients.

An OTP patient must have the same Medicaid managed organization for both the patient's primary care coverage and behavioral health care coverage (currently carved out), with the OTP assigned as the provider.

When Medicaid managed care for primary care was implemented, the Article 28 clinics that were co-located with OTPs were able to apply to join the networks to become providers with managed care plans. However, many of the Article 28 OTP clinics were not accepted into the managed care networks, or OTP patients were not assigned to their OTP providers for primary care. Freestanding Article 28 OTPs frequently found the new primary care Medicaid managed

care panels were "full" and weren't accepting providers that were associated with OTPs. Without the benefit of statistically healthier populations to help balance the managed care equation, many Article 28 clinics associated with OTPs were not warmly welcomed into managed care plans. OTP Medicaid patients were passively enrolled into Medicaid managed care for their primary care at other locations. The patients who had been receiving primary care where they were seen regularly by OTPs were "autoassigned" to primary care providers they didn't know. Managed care resulted in deintegration of care for these patients.

The result is that today, when OTP patients present for an admission or annual physical, and the OTP medical staff asks, "Who is your primary care provider?" often the patient doesn't know or can't say when was the last time they were seen by the primary care provider.

A 2009 United Hospital Fund study of New York City of high-cost Medicaid patients voices this frustration: "I always see somebody different, a different doctor all the time.... I don't know if he's going to remember what I told him last month. They don't really know you" (Birnbaum & Halper, 2009).

During the AIDS epidemic, many OTPs certified onsite, co-located medical services to be available for their high-risk patients and added infectious disease specialists to their medical staff. Article 28-certified OTPs that provided primary care for their patients were eligible to receive enhanced rates for HIV care.

Studies have shown that being a patient in an OTP is linked to lower incidence of HIV disease in this high-risk population. According to one study (Hartel & Schoenbaum, 1998):

Properly dosed, long-term methadone treatment was found to be a central protective factor in preventing HIV infection from the earliest days of the epidemic in New York City. It is crucial to have high quality drug treatment programs in place before an epidemic draws our attention to the inadequacies through excess and unnecessary morbidity and mortality.

Redesigning New York's Medicaid Program

New York has a vision to transform the Medicaid system from a fee-for-service system to a value-based managed care model. The implementation has been phased to roll out in stages, with the transition to "carving in" all behavioral health care in New York City by October 2015 and the rest of the state and children's services in 2016. The integration of behavioral health and physical health is a key goal of Medicaid redesign. The homepage of the website says, "The behavioral health Medicaid managed care transition will facilitate a fully integrated behavioral health and physical health service system." The financial management and macro system management components of the Triple Aim will be fully addressed during this phase. The redesign of primary care component has been planned and requires full implementation in the OTPs.

Care integration is included in the Medicaid Redesign Team Behavioral Health Reform Work Group's mission (New York State Department of Health, n.d.-b), which reads:

- Consider the integration of substance abuse and mental health services, as well as the integration of these services with physical health care services, through the various payment and delivery models.
- Examine opportunities for the co-location of services, and also explore peer and managed addiction treatment services and their potential integration with BHOs.
- Provide guidance about health homes, and propose other innovations that lead to improved coordination of care between physical and mental health services.

New York's goals correspond to SAMHSA's strategic plan, "Leading Change 2.0: Advancing the Behavioral Health of the Nation 2015–2018." In the new Health Care and Health Systems Integration Initiative, SAMHSA specifies the leadership potential of OTPs in the area of primary care and addiction services integration.

The SAMHSA–HRSA *Standard Framework for Levels of Integrated Healthcare* (Heath, Wise, & Reynolds, 2013) envisions a fully integrated level of care in a co-located system at the highest level:

Level 6 — Full Collaboration in a Transformed/Merged Practice: The highest level of integration involves the greatest amount of practice change. Fuller collaboration between providers has allowed antecedent system cultures (whether from two separate systems or from one evolving system) to blur into a single transformed or merged practice. Providers and patients view the operation as a single health system treating the whole person. The principle of treating the whole person is applied to all patients, not just targeted groups.

This highest level of collaboration and integration level is achievable in OTPs because the OTPs are a single transformed program, use a team of multidisciplinary team providers, co-located in the same space, with a history and shared experience of collaboration.

Health Care and Health Systems Integration Strategic Initiative

→ New Program Proposal: Primary Care and Addiction Services Integration (PCASI)

- Allow addiction treatment providers to offer an array of physical health and addiction treatment services
- Modeled after Primary/Behavioral Health Care Integration (PBHCI) program
- OTPs can be leaders in this area

Delivery System Reform Incentive Payment

Delivery System Reform Incentive Payment (DSRIP) is the main mechanism by which New York State will implement the Medicaid Redesign Team Waiver Amendment. DSRIP's purpose is to fundamentally restructure the healthcare delivery system by reinvesting in the Medicaid program, with the primary goal of reducing avoidable hospital use by 25 percent over 5 years. Up to \$6.42 billion dollars are allocated to this program, with payouts based on achieving predefined results in system transformation, clinical management, and population health (New York State Department of Health, n.d.-a).

The DSRIP program created regional lead performing provider systems (PPSs) that in turn formed large networks of safety net providers from across the health care continuum. The goal is for the newly-formed partnerships to collaborate on specified projects that will encourage system transformation to a value-based, outcomes-driven model, thereby achieving the desired 25 percent reduction in avoidable hospitalizations across New York State over 5 years.

A key theme and high-scoring project (DSRIP funds are awarded through a scored project application process) is Project 3.a.i: The Integration of Primary Care and Behavioral Health Services.

COMPA, the advocacy organization representing the OTP system in New York, worked with the New York State OASAS to present OTPs as providers that are uniquely qualified and positioned to respond to participate in this project. Fully integrated care in the OTPs with the following elements can be quickly implemented:

- OASAS has agreed to immediate approval of the simple single-agency and license waiver required for the regulatory change, which would include the elimination of the 5-percent cap on billing physical health visits and establish OTPs as primary care providers.
- The current APG reimbursement rates and mechanism for physical health visits will be used.
- OTP programs will have the option to become the primary care providers for their enrolled OTP patients, with an option to increase capacity annually.
- Enrolled OTP patients will be assigned to their current OTP provider for primary care, with provision for patients to opt out to remain with or choose a different primary care provider.
- Medicaid managed care organizations will coordinate coverage for behavioral and physical health care.
- Linkages will be established with health home care coordination teams and peers used to facilitate referrals for specialty care, etc.

There is a wealth of evidence to support this integrated model of care:

- Hundreds of peer-reviewed scientific studies published over decades prove success of medication in treating opiate dependence.
- OTPs have the lowest cost per successful outcome.

- OTP comprehensive treatment includes frequent patient contact by regulation, allowing for effective monitoring.
- Providers are able to respond to opiate epidemic through medications and immediate increased capacity for and access to buprenorphine treatment.

According Dennis McCarty et al. (2010):

An analysis of the cost and utilization of health care among opioid dependent individuals enrolled in a large integrated health plan reported a mean annual cost per opioid dependent member of \$11,200 (2004 dollars); the most expensive opioid dependent members were those with minimal (one visit) or no contact with addiction medicine (M = \$18,604) while those who received addiction counseling services (M = \$14,157) and methadone plus counseling (M = \$7,163) used less inpatient and emergency care.

The total costs of care for patients receiving methadone maintenance were 50 percent less than the costs for patients receiving counseling without medication. They were 62 percent lower when compared to those for opioid dependent patients who did not receive addiction medicine services.

Importantly, these cost savings reflect only health care costs, not criminal justice costs or other social costs. Health plans that offer buprenorphine and methadone for opioid dependence reduced the use of relatively expensive emergency and inpatient services and reduced total health care costs."

There are some disadvantages to integrating care in the OTPs through DSRIP. There has been inconsistent involvement and inclusion of the OTPs in DSRIP Project 3.a.i, Integration of Primary Care and Behavioral Health Services, across PPS networks in New York State. Overall, there is little familiarity with the OTP treatment system. The task of educating the PPS networks about the role that OTPs can play in the healthcare transformation is complicated by the short project timelines and regionalization of the DSRIP system. This challenge poses a risk to the universality that is a precondition of the Triple Aim.

An alternate path to integration, and one that can easily be used by any state, would be for the state agency to authorize the OTP as the primary care provider. In New York, this would include a waiver to eliminate the 5-percent limit on physical health visits in OTPs and a corresponding listing of the OTP as all OTP patients' managed care primary care provider, with an opt-out option for patients and providers. Authorizing the OTP as the primary care provider will ensure that a uniform, high-quality level of care is provided whether a patient is receiving integrated colocated treatment services in Staten Island or in Buffalo.

This proposal will enable an immediate cost-savings seen in reduced avoidable hospitalizations that is the ultimate goal of DSRIP.

Roads to Primary Care Integration

To summarize, two possible roads to primary care integration are:

- Integrated primary care in OTPs through the DSRIP waiver applied for by a regional PPS is one path to integrated primary care.
- An overall waiver for the OTP system from OASAS through Medicaid redesign.

Readiness Is All

Developing the current, co-located physical health care OTP model which is now providing urgent care throughout New York to a fully integrated model which can also provide preventive primary care requires far less adjustment than would be necessary for a behavioral health provider with no experience providing physical health care. OTP medical staff are currently contemplating edits to electronic medical records, (population health management) and considering outcome measures. The infrastructure and expertise is in place. There are relationships with labs, diagnostic services, and specialty referrals. There is a system for hospital backup and emergency coverage. There is also experience treating the special medical needs of this population. Most importantly, in this fully integrated model, medically complicated, high-risk patients who are already receiving an annual physical exam and needed medical care from providers with whom they have established relationships with, will be able to access preventive primary care without being asked to go somewhere else to find it.

Fully integrating primary care for OTP patients into the OTPs will improve the outcomes for patients. This new model of integrated primary care in OTPs will achieve the Triple Aim.

References

<u>Barnett, P. G.</u>, & <u>Hui, S. S.</u> (2000). The cost-effectiveness of methadone maintenance. *Mount Sinai Journal of Medicine*, 67(5–6), 365–374.

Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: Care, health, and cost. *Health Affairs* 27(3), 759–769. Retrieved from http://content.healthaffairs.org/content/27/3/759.full

Birnbaum, M., & Halper, D. E. (2009). Rethinking service delivery for high-cost Medicaid patients. New York, NY: Medicaid Institute at United Hospital Fund. Retrieved from http://www.uhfnyc.org/assets/1383

Boyd, C., Leff, B., Weiss, C., Wolff, J., Hamblin, A., & Martin, L. (2010). Faces of Medicaid: Clarifying multimorbidity patterns to improve targeting and delivery of clinical services for Medicaid populations. Center for Health Care Strategies. Retrieved from http://www.chcs.org/resource/faces-of-medicaid-clarifying-multimorbidity-patterns-to-improve-targeting-and-delivery-of-clinical-services-for-medicaid-populations/

Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. (2005). *Medication-assisted Treatment for Opioid Addiction in Opioid Treatment Programs*. Treatment Improvement Protocol (TIP) 43. Rockville (MD): Substance Abuse and Mental Health Services Administration. Available from http://www.ncbi.nlm.nih.gov/books/NBK64164

Friedmann, P. D., Hendrickson, J. C., Gerstein, D. R., Zhang, Z., & Stein, M. D. (2006). Do mechanisms that link addiction treatment patients to primary care influence subsequent utilization of emergency and hospital care? *Medical Care* 44(1), 8–15.

Hartel, D. M., & Schoenbaum, E. E. (1998). Methadone treatment protects against HIV infection: Two decades of experience in the Bronx, New York City. *Public Health Reports*, *13*(Suppl 1), 107–115.

Heath, B., Wise, R. P., & Reynolds K. (2013). *A standard framework for levels of integrated healthcare*. Washington DC, SAMHSA–HRSA Center for Integrated Health Solutions. Retrieved from http://www.integration.samhsa.gov/integrated-care-models/A Standard Framework for Levels of Integrated Healthcare.pdf

Irmiter, C., Barry, K. L., Cohen, K., & Blow, F. C. (2009). Sixteen-year predictors of substance use disorder diagnoses for patients with mental health disorders. *Substance Abuse*, *30*(1), 40–46.

Laine, C., Hauck, W. W., Gourevitch, M. N., Rothman, J., Cohen, A., & Turner, B. J. (2001). Regular outpatient medical and drug abuse care and subsequent hospitalization of persons who use illicit drugs. *JAMA*, 285(18), 2355–2362.

Mahoney, K. (2013). The benefits of including methadone treatment in Illinois' state Medicaid plan. Retrieved from

 $\frac{https://www.scribd.com/doc/181749534/White-Paper-on-Medicaid-Coverage-for-Methadone-Treatment-for-Opioid-Dependence-pdf}{}$

McCarty, D., Perrin, A., Green, C. A., Polen, M. R., Leo, M. C., & Lynch, F. (2010). Methadone maintenance and the cost and utilization of health care among individuals dependent on opioids in a commercial health plan. *Drug and Alcohol Dependence*, 111(3), 235–240.

New York State Department of Health. (n.d.-a). *DSRIP overview*. Retrieved from https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/overview.htm

New York State Department of Health. (n.d.- b). *Medicaid Redesign Team: Behavioral Health Reform Work Group*. Retrieved from https://www.health.ny.gov/health_care/medicaid/redesign/behavioral_health_reform.htm

New York State Department of Health. (n.d.-c). *A plan to transform the empire state's Medicaid program: Better care, better health, lower costs.* Retrieved from https://www.health.ny.gov/health_care/medicaid/redesign/docs/mrtfinalreport.pdf

New York State Health Foundation. (2011). *Grant outcomes report: Improving chronic illness care in New York State*. Retrieved from http://nyshealthfoundation.org/uploads/gor/improving-chronic-illness-care-new-york-state-april-2011.pdf

New York State Office of Alcoholism & Substance Abuse Services. (2013). Ambulatory patient groups (APG) policy and Medicaid billing guidance. Retrieved from <a href="http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCAQFjAA&url=http%3A%2F%2Fwww.oasas.ny.gov%2Fadmin%2Fhcf%2Fapg%2Fdocuments%2Fapgmanual.pdf&ei=mki_VLjqG8ucNuTugbAK&usg=AFQjCNE2vAf4TAAEEHMxtSVXDDa_FG4KXQ&sig2=w6-gywdBJlBEDeeTRB4QbQ&bvm=bv.84116906,d.eXY

<u>Parthasarathy, S., Mertens, J., Moore, C., & Weisner, C.</u> (2003). Utilization and cost impact of integrating substance abuse treatment and primary care. *Medical Care*, 41(3), 357–367.

Potter, J., Marino, E., Hillhouse, M., Nielsen, S., Wiest, K., Canamar, C. P., ... Ling, W. (2013). Buprenorphine/naloxone and methadone maintenance treatment outcomes for opioid analgesic, heroin, and combined users: findings from starting treatment with agonist replacement therapies (START). *Journal of Studies on Alcohol and Drugs*, 74(4), 605–613.

Rodin, D., & Meyer, J. (2014). *Health care costs and spending in New York State*. New York, NY: New York State Health Foundation. Retrieved from http://nyshealthfoundation.org/uploads/resources/health-care-costs-in-NYS-chart-book.pdf

Increasing Access to Medication-assisted Treatment for Opioid Addiction in Drug Courts and Correctional Facilities and Working Effectively With Family Courts and Child Protective Services

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Introduction

This is the third of three policy papers that the American Association for the Treatment of Opioid Dependence (AATOD) has developed for the Substance Abuse and Mental Health Services Administration (SAMHSA) in the U.S. Department of Health and Human Services. The aim of these three policy papers is to provide a blueprint for more innovative and integrated service delivery for opioid treatment programs (OTPs) and authorized prescribers under the Drug Addiction Treatment Act of 2000 (DATA 2000), which primarily use buprenorphine to treat opioid addiction.

This paper describes opportunities for OTPs and authorized prescribers under DATA 2000 to work with drug courts, correctional facilities, probation and parole offices, and family courts and Child Protective Services (CPS). It provides effective strategies to achieve challenging goals at a time when opioid abuse and addiction has increased sharply throughout the United States.

Each of the three sections of this paper has an important focus. The first describes how OTPs and authorized prescribers under DATA 2000 can best engage drug courts. Doug Marlowe provides excellent examples of how to achieve this end result. He indicates in this section of the paper that the most effective way to garner support for medication-assisted treatment (MAT) is "to educate drug court team members about its use when a contentious case is not presently at issue." Mr. Marlowe goes on to say that "OTPs and other MAT providers may find it necessary to engage in proactive outreach strategies to educate drug courts in their communities." Harlan Matusow et al. (2013), who conducted a survey among drug court professionals, found that 56 percent of drug courts referred their participants to OTPs for MAT and 44 percent did not. The survey also found that only about half of the drug courts that did not offer MAT reported having a blanket policy against MAT (Matusow et al., 2013).

To quote the Adult Drug Court Best Practice Standards, from the National Association of Drug Court Professionals (2013):

Numerous controlled studies have reported significantly better outcomes when addicted offenders receive medically assisted treatments including opioid agonist medications such as Naltrexone, opioid antagonists such as methadone, and partial agonist medications such as buprenorphine. Therefore, a valid prescription for such medications should not serve as the basis for a blanket exclusion from a drug court.

The point of including Doug Marlowe's section, with recommendations on how OTPs and DATA 2000 practices can better engage and educate drug courts in the United States, is to break through the existing isolation which prevents drug court participants from gaining better access to the three federally approved medications to treat opioid addiction (methadone, buprenorphine, and combination naltrexone products). This is especially critical in an era of increasing opioid addiction, which has been repeatedly reported by federal agencies and professional journals for many years. The National Institute on Drug Abuse (2012) has established that MAT "increases patient retention and decreases drug use, infectious disease transmission, and criminal activity."

The second section of this paper provides recommendations to OTPs and authorized prescribers under DATA 2000 about methods of improving access to pharmacotherapy for opioid use disorders within the criminal justice system. Many studies have pointed to the need to increase access to MAT for opioid addiction when people are under legal supervision. In fact, a key recommendation from the National Institutes of Health (1997) indicated that "all opioid dependant persons under legal supervision should have access to methodone maintenance therapy." Though this recommendation was made in 1997, few correctional facilities in the United States have provided access to such care. In this section of the paper, Drs. Sarah Wakeman and Jody Rich describe ways to work with U.S. correctional facilities to improve access to MAT. They focus on several models that exist at the present time, including having OTPs delivering medication to correctional settings and, alternatively, locating the OTP within the correctional setting.

In its groundbreaking paper, Legality of Denying Access to Medication Assisted Treatment in the Criminal Justice System, the Legal Action Center (2011) makes the case very well:

An estimated 65% of individuals in United States' prisons or jails have a substance abuse disorder, and a substantial number of these individuals are addicted to opioids. Rates are at least as high in all other phases of the criminal justice system. This enormous amount of substance use among individuals with criminal justice involvement has far reaching consequences, including higher recidivism rates, harm to families and children of criminal justice involved individuals, and negative public health effects, including the transmission of infectious diseases and overdose deaths.... Denial of access to MAT at any level of the criminal justice system violates the ADA [Americans with Disabilities Act] and the Rehabilitation Act where the denial is pursuant to a blanket policy prohibiting MAT or is carried out on a case by case basis without the required objective, individualized evaluation.

Federal agencies and state correctional entities need to develop arrangements so that people under legal supervision who are opioid addicted can get access to the three federally approved medications to treat opioid addiction in the United States. Drs. Wakeman and Rich make the point succinctly:

Among state prisoners with a drug use disorder in 2004, only 0.8 percent received detoxification services, 0.3 percent received maintenance pharmacotherapy, and 6.5 percent received counseling by a professional. According to the World Health Organization, incarcerated individuals should have access to the same treatments offered in the community, including opioid agonist therapy.

The third and final section of this paper focuses on how OTPs and DATA 2000 practices can work with Child Protective Services (CPS) and family courts. Pamela Peterson Baston makes a critical point: "Failure of the child welfare and SUD treatment system to work together to identify, assess, connect to, and stabilize in treatment, parents with children in out of home placement, results in fiscally and emotionally costly consequences including termination of

parental rights." The author provides excellent recommendations on how substance abuse treatment programs can work to educate representatives in CPS and family courts.

Ms. Peterson Baston makes another observation as well:

Cross-training is needed for all relevant parties in the opioid treatment and CPS sectors on how to timely identify and respond to parents with opioid use and other SUDs including the importance of MAT. New Jersey and Pennsylvania are in various stages of expanding and improving SUD training.

One final point, to preface the sections that follow, is provided by SAMHSA (2005) in its Treatment Improvement Protocol (TIP) 43, *Medication Assisted Treatment for Opioid Addiction in Opioid Treatment Programs*:

Discussions about whether addiction or a medical disorder is a moral problem have a long history. For decades, studies have supported the view that opioid addiction is a medical disorder that can be treated effectively with medications administered under conditions consistent with their pharmacological efficacy, when treatment includes comprehensive services, such as psychosocial counseling, treatment for co-occurring disorders, medical services, vocational rehabilitative services, and case management services.

References

Legal Action Center. (2011). Legality of denying access to medication assisted treatment in the criminal justice system. Retrieved from http://lac.org/wp-content/uploads/2014/12/MAT_Report_FINAL_12-1-2011.pdf

Matusow, H., Dickman, S. L., Rich, J. D., Fong, C., Dumont, D. M., Hardin, C., ... Rosenblum, A. (2013). Medication assisted treatment in US drug courts: Results from a nationwide survey of availability, barriers and attitudes. *Journal of Substance Abuse Treatment*, 44(5), 473–480.

National Association of Drug Court Professionals. (2013). *Adult drug court best practice standards* (Vol. 1). Retrieved from http://www.nadcp.org/sites/default/files/nadcp/AdultDrugCourtBestPracticeStandards.pdf

National Institute on Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services. (2012). *Medication-assisted treatment for opioid addiction*. Retrieved from http://www.drugabuse.gov/sites/default/files/tib_mat_opioid.pdf

National Institutes of Health, U.S. Department of Health and Human Services. (1997). *Effective medical treatment of opiate addiction*. Retrieved from https://consensus.nih.gov/1997/1998treatopiateaddiction108html.htm

Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. (2005). *Medication-assisted treatment for opioid addiction in opioid treatment programs*. Treatment Improvement Protocol (TIP) 43. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Increasing Access to Medication Assisted Treatment in Drug Courts Douglas B. Marlowe, J.D., Ph.D.

Introduction

Drug courts provide fertile ground for increasing access to medication-assisted treatment (MAT) for justice involved individuals. Drug courts are, first and foremost, *courts*; as such, the constitutional principle of due process applies to most of their operations. Drug court judges are bound by legal precedent, must consider relevant evidence before making factual decisions, and must explain the rationales for their decisions in a written record if requested, and their decisions may be overruled by an appellate court. This level of treatment accountability is virtually nonexistent in other criminal justice and substance use disorder (SUD) treatment settings.

Evidence suggests drug courts offer MAT considerably more often than most other criminal justice and SUD treatment programs. A national survey of 93 drug courts found that more than half (56 percent) of the programs offered MAT (Matusow et al., 2013). This figure compares quite favorably to rates ranging from 4 to 17 percent for probation programs (Chandler, Fletcher, & Volkow, 2009; Friedmann et al., 2012) and 7 to 13 percent for non-OTP community treatment programs (Aletraris, Edmond, & Roman, 2015; Kleber, 2008; McLellan, Carise, & Kleber, 2003; National Center on Addiction and Substance Abuse, 2012; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014).

Of the 44 percent of drug courts in the national survey that did not offer MAT, about half (20 to 25 percent of all drug courts in the survey) reported having a blanket prohibition against MAT (Matusow et al., 2013). Many drug courts (approximately 25 to 30 percent of all drug courts) reported confronting practical barriers that prevented them from using MAT. The most common barriers were insufficient funding and a dearth of MAT providers in their communities. Expanding access to MAT providers and increasing third-party reimbursement for MAT could, therefore, be expected to substantially increase adoption of MAT in many drug courts.

For the minority of drug courts that continue to have blanket prohibitions against MAT, a number of strategies are available to challenge those prohibitions and increase the adoption of MAT in appropriate cases. A more difficult challenge is to convince drug courts of the need for MAT in contested cases, in which conflicting medical testimony is offered by opposing experts. Recommendations for challenging blanket prohibitions against MAT and making a convincing case for the use of MAT in contested cases are described below. A forthcoming National Association of Drug Court Professionals (NADCP) publication will provide more in-depth information to help drug courts evaluate requests for MAT in contested cases (Nordstrom & Marlowe, in press). ¹

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¹ See Appendix for additional resources describing best practices for MAT in drug courts.

Best Practice Standards for MAT in Drug Courts

The professional standard of care for drug courts requires programs to allow MAT in appropriate cases. In 2010, the board of directors of NADCP issued a unanimous resolution directing drug courts to (1) keep an open mind and learn the facts about MAT, (2) obtain expert medical consultation when available, (3) make a fact-sensitive inquiry in each case to determine whether MAT is medically indicated or necessary for the participant, and (4) explain the court's rationale for permitting or disallowing the use of MAT (NADCP, 2010). The resolution states explicitly that drug courts should not have blanket prohibitions against MAT.

In 2013, NADCP released Volume I of the *Adult Drug Court Best Practice Standards* (NADCP, 2013). Standard I (Target Population) provides that candidates for drug court should not be excluded from participation in the program because they have a legally valid prescription for an addiction or psychiatric medication. Standard V (Substance Abuse Treatment) further directs drug courts to offer MAT when prescribed and monitored by a physician with expertise in addiction psychiatry, addiction medicine, or a related medical specialty. Finally, Standard VI (Complementary Treatment and Social Services), released in 2015, directs drug courts to offer psychiatric medications for co-occurring mental health disorders when prescribed and monitored by a psychiatrist or other duly trained medical practitioner (NADCP, 2015).

Drug courts that ignore these provisions are operating below the recognized standard of care for the profession. These drug courts expose themselves to serious criticism, may find themselves ineligible for certain drug court funds, and may be overruled on appeal.

Legal Standards for MAT in Drug Courts

Best practice standards are derived from scientific evidence indicating which policies and practices produce the best outcomes in drug courts. Legal standards, in contrast, are derived from constitutional and other legal principles governing what actions may be taken in a court of law. Legal standards relating to MAT vary considerably, depending on whether a drug court is receiving federal funding and whether contrary medical evidence has been offered to challenge the propriety of a prescription.

Beginning in 2015, the Bureau of Justice Assistance (BJA) required drug courts receiving federal funding pursuant to the Adult Drug Court Discretionary Grant Program to attest in writing that they would not deny eligible candidates access to the program because of an individual's use of an FDA-approved medication for the treatment of an SUD, nor would participants be required to taper off such medications as a condition of graduating from the program (Bureau of Justice Assistance [BJA], 2015a, 2015b). The grant language creates a difficult-to-rebut presumption that MAT will be permitted if it is prescribed lawfully by a licensed medical practitioner who has examined the participant, diagnosed the participant as having a severe SUD, and determined the medication is appropriate to treat that disorder. Drug courts may overrule such determinations only if the judge makes an explicit finding that the participant is misusing, abusing, or diverting the prescription medication for illicit purposes.

² See Appendix for resources describing the standard of care and best practices for MAT in drug courts.

This mandate applies only to drug courts receiving BJA or SAMHSA funding; however, it offers an apt analysis for any drug court dealing with an uncontested prescription for MAT. The burden of proof in these matters is a relatively light standard referred to as a *preponderance of the evidence*. It must be more likely than not (more than 50 percent likely) that a prescription is medically indicated or medically necessary for the participant. (The terms *medical indication* and *medical necessity* are defined later.) If there is no opposing medical evidence suggesting that a prescription may be unnecessary or contraindicated, then this light burden of proof will be satisfied in most cases. Barring any medical evidence to the contrary, there is little justification for a drug court to deny a lawful prescription for MAT from a qualified physician who has diagnosed the participant and will continue to treat the participant going forward.

A more difficult challenge arises if a drug court is not receiving federal funding and is offered to suggest that, contrary to medical evidence, the prescription may not be medically necessary or indicated. If, for example, the prosecution offers its own medical evidence suggesting that a prescription is unnecessary, the judge will need to make a ruling on the matter after listening to medical evidence from both sides. In this relatively circumscribed set of cases, medical experts will be required to provide the drug court with a convincing rationale for using or not using MAT based on the facts of the case.

Unfortunately, many physicians are unaccustomed to having their medical decisions questioned by laypersons, and even competent physicians can have a difficult time explaining their decision-making process to nonmedical professionals. Some physicians may misinterpret legitimate questions about the basis for their opinion as an indication that drug courts are against MAT or that judges are practicing medicine without a license. This inference is not justified. A judge who questions the rationale for a medical expert's opinion in a contested case is practicing law, not medicine. A medical expert who refuses or is unable to answer such questions does a disservice to his or her patient and the administration of justice.

Educating the Drug Court Team

The most effective way to garner support for MAT is to educate drug court team members about its use when a contentious case is not presently at issue. Once a dispute about MAT has arisen in a specific case, staff members may feel compelled to defend current practices and the judge will be obligated to make a decision within a short period of time. These pressures can work against reconsideration of long-held beliefs. Staff will need time to reflect on the issues, deliberate with fellow drug court team members, and convince colleagues from their respective agencies to reconsider entrenched practices. Forcing the matter in light of a contentious case can lead to intransigence and unwillingness to revisit old policies.

Drug court training conferences are held every year at the national, state, and regional levels. Frequently, drug court teams attend these conferences together as a group. In addition, team members often attend conferences for their respective professions, such as conferences for judges, prosecutors, defense lawyers, probation officers, or treatment professionals. These conferences provide excellent opportunities to educate drug courts about MAT. Contrary to the assumptions of some physicians, evidence suggests drug court professionals are generally open to learning about MAT from qualified faculty and report more favorable attitudes toward MAT as a result (Matejkowski et al., 2015). Unfortunately, drug court professionals who do not attend

such conferences are often the ones most resistant to adopting evidence-based practices. OTPs and other MAT providers may find it necessary to engage in proactive outreach strategies to educate drug courts in their communities.

Many drug courts hold oversight meetings or staff retreats on a semiannual or annual basis, in which the team reviews the overarching policies and procedures for the program. It is common practice to invite outside experts to these retreats to give brief presentations about resources that are available in the local community, such as mentoring programs, vocational internships, or community-college scholarships. OTPs and other MAT providers are encouraged to contact the coordinator for the drug court or the judge's clerk to request an opportunity to speak about MAT at an oversight meeting. Most drug courts will gladly accept a free educational opportunity, especially if it includes an offer of refreshments or a brown bag lunch.

Drug courts also have weekly case reviews or staffings prior to holding court sessions. At these staffings, team members share their observations about participants' performance in the program and may offer recommendations to the judge for suitable rewards, sanctions, or treatment conditions to impose. Every drug court team includes a treatment representative who provides expertise on clinical matters. The treatment representative may request permission for an MAT expert to attend a staffing and provide medical information related to a specific case. As a practical matter, medical experts are more likely to be invited to attend staffings if they are already familiar to the drug court team and they have provided educational trainings previously.

Challenging Blanket Prohibitions

Despite best efforts at education and outreach, some drug courts may continue to deny MAT as a matter of policy. Under such circumstances, it may become necessary to challenge lawfulness of such policies. Assuming an adversarial posture should be a strategy of last resort, because it may undermine collaborative decision making, inadvertently pit staff sentiments against a participant's therapeutic interests and usually requires considerable time to reach a resolution. In many instances, simply demonstrating a willingness to challenge an existing policy will be sufficient to lead a drug court to reconsider its actions.

Drug court judges, like all trial judges, are bound by a constitutional due process requirement of *reasonableness* or *rationality* when ordering conditions of treatment and supervision for persons on probation or in comparable community dispositions (Petersilia, 1998; Roberts v. U.S., 1943). The conditions may not be unnecessarily broad or arbitrary, and they must be reasonably related to the person's crime, likelihood of rehabilitation, or risk of future criminality (Commonwealth v. Hartman, 2006; People v. Beaty, 2010; State v. Philipps, 1993). Judges are also required to impose individualized or particularized conditions (Commonwealth v. Wilson, 2010; In re. Victor L., 2010; U.S. v. Carter, 2009). This means every defendant has a right to introduce relevant evidence specific to his or her case. It is fundamentally unfair (i.e., unconstitutional) for a judge to make a factual determination in one case and to assume, conclusively, that the same facts apply in other cases.³

³ An exception is when courts take *judicial notice* of facts that are so well established there is no need to relitigate the issues in individual cases. For example, a court might take judicial notice of the fact that buprenorphine is approved by the Food and Drug Administration (FDA) for the treatment of opioid dependence. Courts have not taken judicial notice of facts that would justify a blanket prohibition against MAT.

These constitutional principles require drug court judges to (1) consider relevant information before making a factual decision, (2) hear arguments from both sides of a controversy (typically from the defense and prosecution), and (3) receive evidence from scientific experts if the subject matter of the controversy is beyond the common knowledge of laypersons (Meyer, 2011). Medical evidence is typically beyond the knowledge of laypersons; therefore, it must usually be introduced or explained by a qualified medical expert (e.g., *Federal Rule of Evidence 702*, 2015).

A drug court judge who enforces a blanket prohibition against MAT (or against particular medication, such as methadone or buprenorphine) is, in effect, prejudging a factual matter before hearing evidence from both sides and considering the particularized facts of the case. Refusing to consider relevant evidence before making a factual determination is likely to be viewed by an appellate court as an abuse of judicial discretion. Appellate courts will frequently overrule such baseless decisions and return the case to the trial court to reconsider the matter.

Candidates for drug court are nearly always represented by defense counsel during the admissions process. Once admitted to drug court, participants usually retain their own defense counsel or are represented by another defense attorney (typically an assistant public defender) who is a core member of the drug court team. Defense attorneys are entitled to request a hearing on the question of whether MAT should be permitted for a given participant. The judge is not required to grant a full and separate proceeding on the matter but must allow a reasonable opportunity for the participant or the participant's legal representative to present an argument. If the judge refuses to grant such a hearing or otherwise indicates the matter is not open for consideration, that refusal may serve as an immediate basis for an interlocutory (interim) appeal. The participant may file an appeal immediately and does not have to wait until after he or she has completed or been discharged from the program. An alternative strategy is to petition an appellate court for a *writ of mandamus*, which directs the drug court to hold a hearing on the matter of MAT, or a *writ of prohibition*, prohibiting the drug court from enforcing an unreasonable policy.

As stated previously, hopes are this process can be avoided and an appeal will not be necessary. Often, requesting a hearing on the question of MAT will be sufficient to convince a drug court of the need to reconsider current practices.

Contested Matters

In the typical health care setting, the physician makes most medication-related decisions in collaboration with the patient. The matter is settled in most instances if (1) the physician has legal authority to write the prescription, (2) the medication is indicated to treat the patient's illness, (3) the prescription was not obtained fraudulently, and (4) the patient agrees to take the medication as prescribed. As was discussed previously, drug courts receiving federal funds from BJA or SAMHSA are now required to apply this same analysis unless the judge determines that a participant is misusing, abusing or diverting the medication illegally. For drug courts not receiving federal funding, the analysis is essentially the same for noncontested cases in which there is no contrary medical evidence suggesting a prescription may be unnecessary or contraindicated.

The matter becomes more complicated if a drug court is not receiving federal funding and the question of MAT is contested by opposing medical evidence. The prosecution, for example, might wish to offer evidence from its own medical expert that a prescription is unnecessary or contraindicated, or that the prescribing physician failed to consider important facts which should have changed his or her medical opinion. Under such circumstances, the judge must weigh the medical evidence offered by both sides and decide by a preponderance of the evidence which side's testimony is more convincing.

In evidentiary terms, a valid prescription in a contested case provides prima facie (facially valid) evidence that a prescription is legally authorized, but the judge must make a further determination of whether the prescription is *medically necessary* or *medically indicated*. As was stated earlier, this determination ordinarily requires medical input because it is beyond the ken of a layperson. The judge cannot make this determination based solely on his or her personal beliefs or the arguments of legal counsel. The decision should be based, at least in part, on medical information provided by trained medical experts.

It is an open question which evidentiary standard—medical necessity, medical indication, or perhaps some new standard yet to be articulated—applies to drug court proceedings, and case law is a bit murky in defining these terms. Most cases have defined these terms in legal contexts that were very different from drug courts, such as interpreting contractual provisions in insurance policies. As a general matter, medical necessity calls for more stringent proof than medical indication and requires or permits the judge to take a wider range of factors into consideration (Garber, 2001). In the insurance context, medically necessary treatment has been interpreted to mean treatment that (1) is generally accepted by the medical community for treating the disorder in question; (2) is provided at the most appropriate level and intensity of care; (3) takes into consideration the risks and benefits of the treatment, as well as alternative treatments which may also be available for the same condition; and (4) is proven to be effective at improving health outcomes (e.g., Hawaii Medical Service Association v. Adams, 2009). For example, if a participant requests permission to use buprenorphine, the judge would be required or permitted to consider, among other factors, the relative risks and benefits of buprenorphine as compared to other generally accepted treatments for opiate dependence, such as methadone, naltrexone, or drug-free counseling.

Medical indication is an easier standard to meet than medical necessity and may include elective, optional, or experimental treatments (Garber, 2001; Hawaii Medical Service Association v. Adams, 2009). Several treatments could be medically indicated for the same disorder, and the judge would not necessarily be called upon to balance the relative risks and benefits of each. This does not, however, mean that the judge must defer entirely to a physician's recommendation. The judge must still decide whether the medication is reasonably calculated to help the participant in question. Methadone, for example, is indicated generally for the treatment of opiate dependence; nevertheless, it may not be indicated for a drug court participant who provided incomplete or misleading information to OTP staff or has misused methadone in the past.

Regardless of which standard applies, expert medical evidence will be required to satisfy the evidentiary burden of a preponderance of the evidence. If a prescribing physician refuses to

answer the court's questions or to explain the rationale for a prescription, the burden of proof may not be met and the prescription may be denied.

Making the Case for MAT

It should be clear from the foregoing discussion that acceptance of MAT is not an all-or-nothing proposition. Judges do not have the authority to refuse MAT as a blanket policy, but neither must they defer to a physician's recommendation with no further analysis. Judges always have discretion to disallow a prescription that is being misused, abused, or diverted for illicit purposes, and they are ultimately responsible for deciding whether or not to allow MAT in contested cases that are not covered by the federal funding attestation.

In contested cases, medical experts should be prepared to answer well-taken concerns about their choice of medication and the anticipated timeline for treatment, as well as about how they plan to address foreseeable side-effects of the medication and how they can assist the court to prevent the medication from being diverted to illicit drug markets. If physicians cannot or will not address these concerns, they risk being overruled by the drug court and doing a disservice to their patient.

Choice of Medication

In contested cases, drug courts have not only the authority, but the responsibility, to inquire why a medical expert would choose an agonist medication such as methadone, or a partial agonist such as buprenorphine, over an antagonist such as naltrexone. Methadone and buprenorphine can produce physiological dependence, may cause intoxication or euphoria in nontolerant individuals, have substantial illegal street value, and often require a slow and gradual tapering regimen (Bohnert et al., 2011; Kreek, 2008). Methadone also poses serious risks of side effects, including respiratory suppression and death. Naltrexone, in contrast, generally does not present these risks or side effects (O'Brien & Kampman, 2008).

Logic, therefore, might dictate starting with a presumption that the safer and less complicated medication would be selected as the frontline regimen (Bradley, 1991; Denig, Haaijer-Ruskamp, & Zijsling, 1988; Grant et al., 2007). A common, but unconvincing, response from some medical experts is that patient preference should be a controlling factor in selecting medications. Indeed, a few studies have reported that patient preference was the only factor predicting which medication for opiate addiction would be prescribed in a given case (Ridge, Gossop, Lintzeris, Witton, & Strang, 2009). In typical outpatient practice, where patient dropout is an ever-present concern, it is understandably necessary to accede to patient preference to ensure compliance with the medication regimen. In drug courts, however, the threat of an impending criminal sentence, coupled with intensive supervision by the court, are often sufficient to keep recalcitrant individuals compliant with their medications (Coviello, Cornish, Lynch, Alterman, & O'Brien, 2010; O'Brien & Cornish, 2006). Although patient preference is certainly one factor to be considered by drug courts, other medically relevant factors should also be taken into account in selecting an addiction medication.

A medical expert should be prepared to explain why the circumstances of a contested case justify using a relatively riskier or more complicated medication regimen. For example, prior response

to treatment is often a significant predictor of future response to the same treatment (Stine & Kosten, 2014). If a participant was treated successfully in the past on an agonist or partial agonist medication, reinstating the same regimen might be advisable. In addition, patients must be detoxified from opiates (approximately 7 to 10 days of consecutive abstinence) before beginning a naltrexone regimen (O'Brien & Kampman, 2008). Administering naltrexone prior to detoxification precipitates a severe and potentially medically hazardous withdrawal (SAMHSA, 2012). For participants who are unable to achieve an initial period of opiate sobriety, naltrexone might not be a feasible option. Another concern is that naltrexone reduces physiological tolerance to opiates; therefore, participants may be at risk for overdose and death if they stop taking naltrexone and resume using illicit opiates precipitously (SAMHSA, 2012). Because tolerance is not attenuated when patients are treated with agonist or partial agonist medications, methadone or buprenorphine may be a safer option for participants who have a history of overdose or are otherwise at high risk for overdose.

The above considerations are presented merely as *examples* of how a physician might respond to questions about the choice of an agonist or partial agonist medication in a contested case. Recall that the standard of proof is a preponderance of the evidence. Judges simply need a rational basis for following an expert's recommendation. Refusing to answer such questions or giving vague or patronizing responses interferes with the judge's decision-making function and may cause the physician's recommendation to be discounted and the prescription denied.

Tapering or Discontinuing the Medication

Given that most drug court programs are between 18 and 24 months in duration, it should not be expected that all participants receiving methadone or buprenorphine must be tapered from the medication as a condition of graduation (NADCP, 2013). Nevertheless, drug courts have an obligation to ensure that a physician has considered carefully the issue of tapering and developed a tapering plan or continuing care plan accordingly.

Physicians should give careful thought to this matter and be prepared to explain how they will decide whether and when to taper a medication regimen (American Society of Addiction Medicine, 2014). Specifically, what clinical signs and symptoms will the physician look for in deciding whether a taper is advisable? Are there clinical features in the case that might lead the physician to extend a maintenance regimen for a lengthier period of time, conduct a taper in a slow and stepwise manner, or maintain the patient on the medication indefinitely? For example, if a patient relapsed in the past after being tapered from an agonist or partial agonist medication, this result might suggest that the regimen should be maintained over a longer period of time, tapering should be conducted in a more progressive and stepwise manner, or the patient should be kept on an extended "tail" of the medication indefinitely. If a physician has given little apparent thought to this important question or is unable or unwilling to explain the decision-making process, this may raise a red flag about the level of care being provided and lead the court to deny the request.

It bears repeating that the intent here is *not* to substitute a judge's decision for that of a trained medical expert. The intent, rather, is to help judges understand how and why competent physicians make such decisions. Only then can a drug court judge assess the basis for a medical

recommendation in a contested case and articulate a rational reason for accepting or rejecting the recommendation.

Sedation or Euphoria

Drug courts will rightfully demand immediate and decisive action if a participant on an agonist or partial agonist medication appears to be sedated ("the nods"), euphoric, or disinhibited. Such symptoms may give a countertherapeutic message to other participants, interfere with the productivity of therapy groups or court hearings, and undermine the reputation of the criminal justice system. It may also pose a serious risk to public safety if the participant engages in hazardous activity, such as driving a car or operating heavy machinery. Such conduct cannot be tolerated by a court of law.

Drug courts need to understand how the physician will monitor and respond to such symptoms if they arise. The physician might, for example, reduce the dosage of the medication or reevaluate the patient to ensure an agonist or partial agonist medication is indicated. If clinical observation reveals a participant is not, in fact, tolerant to an opiate agonist, this might suggest the participant was not dependent on opiates to begin with (Kreek, 2008). Some substance-misusing criminal offenders mislead physicians, either intentionally or unintentionally, about the severity of their opiate use symptoms. Physicians who naively assume offenders do not lie or manipulate about such matters are apt to be discredited by criminal justice professionals. Being willing to reconsider one's initial diagnosis in light of new information demonstrates professional maturity and gives a drug court confidence that the physician can be trusted to manage the case.

Illegal Diversion

There is no denying that agonist and partial agonist medications have substantial street value and are sold or traded illegally by individuals receiving lawful prescriptions for the medications. Because buprenorphine may be prescribed outside of licensed and federally regulated OTPs, it has emerged as a prevalent drug of misuse in illegal drug markets (CESAR, 2011). Although many individuals report using nonprescribed buprenorphine to manage cravings and withdrawal (Lofwall & Havens, 2012), buprenorphine is also used frequently by individuals who are nontolerant to opiates for the explicit purpose of becoming intoxicated (Bazazi, Yokell, Fu, Rich, & Zaller, 2011; Daniulaityte, Falck, & Carlson, 2012; Johanson, Arfken, diMenza, & Schuster, 2012). Drug courts cannot permit themselves to be complicit in an illegal drug market.

Several practical measures can be taken by physicians to help drug courts reduce or eliminate the risk of medication diversion. These measures include observing medication ingestion directly, performing drug testing on a random basis to confirm the medication is being taken reliably, conducting random callbacks to the clinic for pill counts, or obtaining reports from prescription drug monitoring programs (PDMPs) where authorized. A physician who fails to recognize the need for such precautions is unlikely to earn the confidence of a drug court.

Conclusion

If OTPs and other MAT providers cannot establish a foothold in drug courts, they are unlikely to do so elsewhere in the criminal justice system. Although some drug courts may need reminding,

the courtroom forum is designed specifically to examine unproven assumptions and discover truth. Due process requires a fair hearing on factual matters and forces all parties to prove the logic and correctness of their assertions. Increasing the use of MAT in drug courts may also create legal precedent and "proof of concept" for other criminal justice programs, such as probation, parole, community correctional centers, jails, and prisons.

Science reveals that some opiate addicted individuals need MAT for a period of time, others may need it indefinitely, and still others will not need it at all. For those who do need MAT, some will be well suited for treatment with an antagonist medication, and others will require an agonist or partial agonist medication. The role of a competent physician and OTP is to determine, based on the best available information, which regimen is most likely to be effective for a given patient. It is also the role of a physician to explain this decision-making process to nonmedical persons, including the patient, the patient's loved ones, and third-party payers. Asking physicians to do the same for criminal justice professionals is entirely consistent with their professional duties and an unavoidable requirement of the law. Additionally, physicians should provide an individualized response to the court with regard to either oversedation or the potential of suboptimal dosing, which would result in ongoing drug use.

Physicians and OTP personnel are likely to find the quality of their medical practice improves significantly when they are asked to articulate their decision-making process to nonmedical professionals. Giving words to one's actions and describing one's thought processes to interested third parties has a way of sharpening clinical skills and enhancing treatment results. Developing collaborative working relationships between physicians and criminal justice professionals is likely to raise the bar for both professions and optimize outcomes for drug addicted persons, the judicial system, and the public at large.

References

Aletraris, L., Edmond, M. B., & Roman, P. D. (2015). Adoption of injectable naltrexone in U.S. substance use disorder treatment programs. *Journal of Studies on Alcohol & Drugs*, 76(1), 143–151.

American Society of Addiction Medicine. (2014). *Standards of care for the addiction specialist physician*. Chevy Chase, MD: American Society of Addiction Medicine.

Bazazi, A. R., Yokell, M., Fu, J. J., Rich, J. D., & Zaller, N. N. (2011). Illicit use of buprenorphine/naloxone among injecting and noninjecting opioid users. *Journal of Addiction Medicine*, *5*(3), 175–180.

Bohnert, A. S., Valenstein, M., Bair, M. J., Ganoczy, D., McCarthy, J. F., Ilgen, M. A., & Blow, F. C. (2011). Association between opioid prescribing patterns and opioid overdose-related deaths. *JAMA*, 305(13), 1315–1321.

Bradley, C. P. (1991). Decision making and prescribing patterns—a literature review. *Family Practice*, 8(3), 276–287.

Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice (2015a). *Adult drug court discretionary grant program FY 2015 competitive grant announcement*. Retrieved from https://www.bja.gov/Funding/15DrugCourtSol.pdf

Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice (201b). *Joint adult drug court solicitation to enhance services, coordination, and treatment FY 2015 competitive grant announcement.* Retrieved from https://www.bja.gov/Funding/15BJASAMHSADrugCourtSol.pdf

Center for Substance Abuse Research. (2011). *Buprenorphine availability, diversion, and misuse: A summary of the CESAR FAX Series*, 20(34). Retrieved from http://www.cesar.umd.edu/cesar/cesarfax/vol20/20-34.pdf

Chandler, R. K., Fletcher, B. W., & Volkow, N. D. (2009). Treating drug abuse and addiction in the criminal justice system: Improving public health and safety. *JAMA*, 301(2), 183–190.

Commonwealth v. Hartman, 908 A.2d 316, 320 (Pa. Super. 2006).

Commonwealth v. Wilson, 11 A.3d 519 (Pa. Super. 2010).

Coviello, D. M., Cornish, J. W., Lynch, K. G., Alterman, A. I., & O'Brien, C. P. (2010). A randomized trial of oral naltrexone for treating opioid-dependent offenders. *American Journal on Addictions*, 19(5), 422–432.

Daniulaityte, R., Falck, R., & Carlson, R. G. (2012). Illicit use of buprenorphine in a community sample of young adult nonmedical users of pharmaceutical opioids. *Drug & Alcohol Dependence*, 122(3), 201–207.

Denig, P., Haaijer-Ruskamp, F. M., & Zijsling, D. H. (1988). How physicians choose drugs. *Social Science & Medicine*, 27(12), 1381–1386.

Federal Rule of Evidence 702. (2015). *Federal Evidence Review 2015*. Retrieved from http://federalevidence.com/downloads/rules.of.evidence.pdf

Friedmann, P. D., Hoskinson, R., Gordon, M., Schwartz, R., Kinlock, T., Knight, K., ... Frisman, L. K. (2012). Medication-assisted treatment in criminal justice agencies affiliated with the Criminal Justice-Drug Abuse Treatment Studies (CJ-DATS): Availability, barriers, and intentions. *Substance Abuse*, 33(1), 9–18.

Garber, A. M. (2001). Evidence-based coverage policy. *Health Affairs*, 20(5), 62–82 Retrieved from http://content.healthaffairs.org/content/20/5/62.full.html .

Grant, R. W., Wexler, D. J., Watson, A. J., Lester, W. T., Cagliero, E., Campbell, E. G., & Nathan, D. M. (2007). How doctors choose medications to treat Type 2 diabetes: A national survey of specialists and academic generalists. *Diabetes Care*, 30(6), 1448–1453.

Hawaii Medical Service Association v. Adams, 120 Haw. 446 (App. 2009).

In re. Victor L., 182 Cal.App.4th 902, 106 Cal.Rptr.3d 584 (2010).

Johanson, C., Arfken, C. L., di Menza, S., & Schuster, C. R. (2012). Diversion and abuse of buprenorphine: Findings from national surveys of treatment patients and physicians. *Drug & Alcohol Dependence*, 120(1), 190–195.

Kleber, H. D. (2008). Methadone maintenance 4 decades later: Thousands of lives saved but still controversial. *JAMA*, *300*(19), 2303–2305.

Kreek, M. J. (2008). Neurobiology of opiates and opioids. In M. Galanter & H. D. Kleber (Eds.), *Textbook of substance abuse treatment* (4th ed.) (pp. 247–264). Washington DC: American Psychiatric Publishing.

Lobmaier, P. P., Kunoe, N., Gossop, M., Katevoll, T., & Waal, H. (2010). Naltrexone implants compared to methadone: Outcomes six months after prison release. *European Addiction Research*, *16*(3), 139–145.

Lofwall, M. R., & Havens, J. R. (2012). Inability to access buprenorphine treatment as a risk factor for using diverted buprenorphine. *Drug & Alcohol Dependence*, *126*(3), 379–383.

Magura, S., Lee, J. D., Hershberger, J., Joseph, H., Marsch, L. Shropshire, C., & Rosenblum, A. (2009). Buprenorphine and mantenance in jail and post-release: A randomized clinical trial. *Drug & Alcohol Dependence*, *99*(1), 222–230.

Matejkowski, J., Dugosh, K. L, Clements, N., & Festinger, D. (2015). Development and pilot testing of an online training to raise awareness among criminal justice professionals of medications to treat opioid addiction. *The Journal of Addictions & Offender Counseling*, 36(1), 13–27.

Mattick, R. P., Kimber, J., Breen, C., & Davoli, M. (2008). Buprenorphine maintenance versus placebo or methadone maintenane for opioid dependence. *The Cochrane Database of Systematic Reviews*, 2008 Apr 16(2), CD002207, 1–33.

Matusow, H., Dickman, S. L., Rich, J. D., Fong, C., Dumont, D. M., Hardin, C., ... Rosenblum, A. (2013). Medication assisted treatment in U.S. drug courts: Results from a nationwide survey of availability, barriers and attitudes. *Journal of Substance Abuse Treatment*, 44(5), 473–480.

McLellan, A. T., Carise, D., & Kleber, H. D. (2003). Can the national addiction treatment infrastructure support the public's demand for quality care? *Journal of Substance Abuse Treatment*, 25(2), 117–121.

Meyer, W. (2011). Constitutional and legal issues in drug courts. In D. B. Marlowe & W. G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 159-180). Alexandria, VA: National Drug Court Institute. Retrieved from

http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf

National Association of Drug Court Professionals. (2010). *Resolution of the board of directors on the availability of medically assisted treatment (M.A.T.) for addiction in drug courts*. Alexandria, VA: National Association of Drug Court Professionals. Retrieved from http://www.nadcp.org/sites/default/files/nadcp/NADCP%20Board%20Statement%20on%20MAT.pdf

National Association of Drug Court Professionals. (2013). *Adult drug court best practice standards*. (Vol. 1). Alexandria, VA: National Association of Drug Court Professionals. Retrieved from

http://www.nadcp.org/sites/default/files/nadcp/AdultDrugCourtBestPracticeStandards.pdf

National Association of Drug Court Professionals. (2015). *Adult drug court best practice standards*. (Vol. 2). Alexandria, VA: National Association of Drug Court Professionals. Retrieved from

http://www.txcourts.gov/media/1074448/adult_drug_court_best_practice_standards_volume_ii.p

National Center on Addiction and Substance Abuse. (2012). *Addiction medicine: Closing the gap between science and practice*. New York, NY: Columbia University.

Nordstrom, B. R., & Marlowe, D. B. (in press). *Medication-assisted treatment for opiate addiction in drug courts: Ensuring the safe, effective, and responsible use of addiction medications for drug court participants*. Alexandria, VA: National Drug Court Institute.

O'Brien, C. P., & Cornish, J. W. (2006). Naltrexone for probationers and parolees. *Journal of Substance Abuse Treatment*, 31(2), 107–111.

O'Brien, C., & Kampman, K.M. (2008). Antagonists of opioids. In M. Galanter & H. D. Kleber (Eds.), *Textbook of substance abuse treatment* (4th ed.) (pp. 325–329). Washington DC: American Psychiatric Publishing.

People v. Beaty, 181 Cal.App.4th 644, 105 Cal.Rptr.3d 76 (2010).

Petersilia, J. (1998). Probation in the United States. APPA Perspectives (Spring 1998), 30–41.

Petitjean, S., Stohler, R., Déglon, J. J., Livoti, S., Waldvogel, D., Uehlinger, C., & Ladewig, D. (2001). Double-blind randomized trial of buprenorphine and methadone in opiate dependence. *Drug & Alcohol Dependence*, 62(1), 97–104.

Ridge, G., Gossop, M., Lintzeris, N., Witton, J., & Strang, J. (2009). Factors associated with the prescribing of buprenorphine or methadone for treatment of opiate dependence. *Journal of Substance Abuse Treatment*, *37*(1), 95–100.

Roberts v. United States, 320 U.S. 264, 272, 88 L. Ed. 41, 64 S. Ct. 113 (1943).

Soyka, M., Zingg, C., Koller, G., & Kuefner, H. (2008). Retention rate and substance use in methadone and buprenorphine maintenance therapy and predictors of outcome: Results from a randomized study. *International Journal of Neuropsychopharmacology*, 11(5), 641–653.

State v. Philipps, 242 Neb. 894, 496 N.W.2d 874 (1993).

Stine, S. M., & Kosten, T. R. (2014). Pharmacologic interventions for opioid dependence. In R. K. Ries, D. A. Fiellin, S. C. Miller & R. Saitz (Eds.), *The ASAM principles of addiction medicine* (5th ed.) (pp. 735–758). Philadelphia, PA: Wolters Kluwer.

Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. (2012). An introduction to extended-release injectable naltrexone for the treatment of people with opioid dependence. *SAMHSA Advisory*, *11*(1). Retrieved from http://store.samhsa.gov/shin/content//SMA12-4682/SMA12-4682.pdf

Substance Abuse & Mental Health Services Administration, U.S. Department of Health and Human Services. (2014). *National Survey of Substance Abuse Treatment Services (N-SSATS):* 2013—Data on substance abuse treatment facilities. Rockville, MD: Center for Behavioral Health Statistics & Quality, U.S. Dept. of Health & Human Services. Retrieved from http://www.samhsa.gov/data/sites/default/files/2013_N-SSATS/2013_N-SSATS_National_Survey_of_Substance_Abuse_Treatment_Services.pdf

U.S. v. Carter, 564 F.3d 325 (4th Cir. 2009).

APPENDIX

National Association of Drug Court Professionals (NADCP) Resources on Medically Assisted Treatment for Drug Courts

Resolution of the NADCP Board of Directors on the Availability of Medically Assisted Treatment (MAT) for Addiction in Drug Courts

 $\frac{http://www.nadcp.org/sites/default/files/nadcp/NADCP\%20Board\%20Statement\%20on\%20MA}{T.pdf}$

Adult Drug Court Best Practice Standards (Standards I.E. and V.G.) http://nadcp.org/sites/default/files/nadcp/AdultDrugCourtBestPracticeStandards.pdf

The Drug Court Judicial Benchbook (Chap. 4, §4.14) http://www.ndci.org/sites/default/files/nadcp/14146 NDCI_Benchbook_v6.pdf

Quality Improvement for Drug Courts: Evidence-Based Practices (Chap. 4) http://www.ndci.org/sites/default/files/nadcp/Mono9.QualityImprovement%20new_0.pdf

Extended-Release Naltrexone (NDCI Practitioner Fact Sheet) http://ndci.org/sites/default/files/nadcp/NDCI%26SAMHSA-Naltrexone-FS%20%281%29%20%281%29.pdf

Improving Access to Pharmacotherapy for Opioid Use Disorder within the Criminal Justice System

Sarah Wakeman, M.D., and Jody Rich, M.D.

Introduction

Nearly two-thirds of incarcerated Americans have a substance use disorder (SUD) (National Center on Addiction and Substance Abuse at Columbia University [CASA], 2010). In addition, half of federal prisoners are incarcerated for drug offenses, and 85 percent of all prisoners are substance involved, meaning they have an SUD, they were under the influence at the time of arrest, or their crime was committed to obtain money to buy drugs (CASA, 2010; Mumola & Karberg, 2006). Despite the high prevalence of alcohol and drug use disorders within correctional facilities, a minority of affected individuals receives any specific treatment. Among state prisoners with a drug use disorder in 2004, only 0.8 percent received detoxification services, 0.3 percent received maintenance pharmacotherapy, and 6.5 percent received counseling by a professional (Mumola & Karberg, 2006).

According to the World Health Organization, incarcerated individuals should have access to the same treatments offered in the community, including opioid agonist therapy (World Health Organization, 2007). While incarceration provides a period of relative abstinence for some individuals with SUD, many relapse to drug use post-release amidst the hectic demands of the reentry period. Furthermore, lowered tolerance increases susceptibility to overdose during this time. The risk of death due to overdose in the 2 weeks immediately following release from incarceration is 129 times higher than among community populations (Binswanger et al., 2007). This increased mortality post release from incarceration among people with SUD seems to persist far longer than just 2 weeks (Chang, Lichtenstein, Larsson, & Fazel, 2015). Although imprisoning people, especially long term, is generally counterproductive to recovery from SUD, incarceration can offer an important opportunity to provide diagnosis, treatment, and linkage to aftercare for those with SUD.

There are three major points of intervention where the criminal justice system is well positioned to provide treatment. During the initial period of entry to a facility, medical staff can systematically screen incoming individuals for opioid use disorder (OUD), manage withdrawal, and assess treatment that has already been initiated in the community. During incarceration, providers can work with the patient to develop a tailored treatment plan, implement this plan, and continuously monitor treatment and adjust accordingly. Finally, during discharge planning, medical staff can link patients to treatment in the community and coordinate care prior to release.

Screening for Opioid Use Disorder, Withdrawal, and Initial Treatment Evaluation

All detained or incarcerated individuals should be screened for OUD during initial intake and medical evaluations. Patients who screen positive should be assessed for acute intoxication, overdose, and withdrawal, which may require immediate attention. Patients already on medication assisted treatment (MAT), including buprenorphine or methadone, should be continued on agonist therapy during incarceration (Rich et al., 2015). Those who screen positive

for opioid use disorder but are not currently receiving pharmacotherapy should be offered medical treatment for withdrawal and assessed for further treatment.

Developing Individualized Treatment Plans

Providers ideally would work with the patient, as well as discharge planning staff to develop a treatment plan for both the period of incarceration and the transition back into the community. In developing the treatment plan, the team should take into account the patient's particular needs, being sure to:

- Assess past treatment history successes and failures.
- Address any co-occurring mental or physical illness.
- Assess barriers to transition to, engage in, and adhere to treatment.
- Assess how long they will be under correctional care.

Once an individualized treatment plan is determined, patients should receive ongoing monitoring, evaluation, and adjustment as necessary. Additionally, the treatment plan should be carefully documented in the patient's medical record and shared with receiving community providers to ease vulnerable care transitions following release.

Opioid agonist treatment during incarceration has been shown to decrease heroin use, injection, and syringe-sharing while in prison (Hedrich et al., 2012). In addition, initiating opioid agonist treatment prior to release increases treatment entry and retention after incarceration (Hedrich et al., 2012). Continuing methadone for those who enter the system also leads to prompter transition to care and greater rates of treatment engagement after release (Chang et al., 2015). Longer treatment duration and appropriately adjusted doses of agonist therapy during incarceration also significantly improve health and social outcomes (Stallwitz & Stöver, 2007). The opioid antagonist, naltrexone, also has some demonstrated efficacy among incarcerated populations. A recent small study of extended-release naltrexone prior to release from jail showed it led to decreased rates of opioid use but also had no impact on recidivism, injection drug use, or overdose; however, larger studies are underway (Lee et al., 2015).

Although the World Health Organization recommends allowing opioid agonist treatment inside correctional facilities, as many other countries do, most United States facilities currently do not offer pharmacotherapy (Nunn et al., 2009). Half of the facilities in this country that do offer methadone limit treatment to detoxification, maintenance of pregnant women, and rarely, management of chronic pain (Nunn et al., 2009). Individuals who are incarcerated while on methadone and buprenorphine maintenance in the community are forced to discontinue treatment, resulting in the severe discomfort of withdrawal. Data indicate that such policies dissuade those at risk of incarceration from engaging in treatment while in the community by fostering fear of withdrawal (Fu, Zaller, Yokell, Bazazi, & Rich, 2013).

Some of the most frequently cited barriers to opioid agonist provision in corrections include limited knowledge of the evidence base for such treatments among administrators, philosophical aversion, and security concerns (Friedmann et al., 2012; Nunn et al., 2009). Structural limitations include lack of qualified staff and misperceptions about the requirements for a facility to become an opioid treatment program (OTP). However, these are surmountable barriers. A

recent multi-site study found correctional staff to be receptive to educational interventions about opioid agonist treatments and organizational linkages to community treatment agencies (Friedmann et al., 2015). Additionally, the study found correctional staff were more likely to make referrals to care after undergoing the intervention. Correctional facilities can promote the acceptability of agonist treatment by educating staff, clarifying misconceptions, and creating linkages with community treatment programs.

Logistics of Providing Opioid Agonist Treatment Within Corrections

Even after surmounting philosophical barriers to opioid agonist treatment (OAT), there are very real logistical challenges to implementing an OAT program within corrections. Learning from existing models that have been successfully implemented can provide useful blueprints for expanding treatment across facilities.

One model successfully implemented at the Rhode Island Department of Corrections was to partner with a community-based methadone maintenance program. In this model, individualized, measured and labeled doses of methadone for each patient are delivered daily by the community agency to the correctional facility. The methadone is picked up at the control desk and passed through multiple security checkpoints, counted, recorded, and ultimately placed in locked storage. Inmates are administered methadone by the correctional nursing staff and observed during and after dosing, and nurses communicate patient response and any side effects to a physician who may adjust the dose as needed. One benefit of this model is that the partnership with the community agency makes it unnecessary for the Department of Corrections to obtain SAMHSA certification to become an OTP. Some challenges with this model include the additional expense, regulation, and the time required from correctional nurses who, unlike staff at community methadone maintenance treatment programs, may not have the expertise in providing this treatment and may be resentful of the additional burden (McKenzie, Nunn, Zaller, Bazazi, & Rich, 2009).

An alternative model is directly licensing a correctional facility as an OTP. New York's Riker's Island program, called the Key Extended Entry Program (KEEP), is a jail-based methadone maintenance program that has been treating detainees since 1987 (Althoff et al., 2013; Nunn et al., 2010). Unlike the Rhode Island model, Project KEEP is a SAMHSA-certified OTP and utilizes both nursing and a correctional officer in its implementation to minimize diversion.

Additionally, prevention of diversion is a crucial component of any program, especially one within corrections. A previous study of male jail inmates found that 1 percent of methadone patients and 10 percent of buprenorphine patients attempted to divert these medications (Jacob Arriola, Braithwaite, Holmes, & Fortenberry, 2007). There are many anecdotes of creative ways that patients have tried to divert medication, including cheeking an absorbent material such as a tampon or foam rubber from a seat cushion or just regurgitating the dose. Working with correctional staff to develop a protocol for managing diversion collaboratively in anticipation of initiating a treatment program may be important.

Lastly, implementation of a buprenorphine treatment program requires attention to unique components which are distinct from methadone. Since buprenorphine is taken sublingually, a protocol to ensure tablets or films are adequately dissolved under the tongue is necessary

(Magura et al., 2009). This requires nursing staff to observe each patient, which can take up to 10 minutes per participant, and requires developing a dosing time that is not interrupted by other schedules (Magura et al., 2009). Lastly, induction with buprenorphine requires awareness of the risk of precipitated withdrawal, although this is generally less of a concern in the correctional setting where there is usually less use of illicit opioids.

Linkage to Care and Community Resources

Providing linkage to treatment in the community and ensuring continuity of care are crucial to preventing relapse, overdose, and return to criminal behavior. There are meaningful steps that correctional facilities and health care providers can take to promote positive health outcomes and treatment engagement among those returning to the community. Developing relationships with community providers and OTPs will help establish clear referral pathways and facilitate linkage of patients to treatment prior to release. These relationships will also improve communication and coordination between past, present, and future providers. The importance of direct communication between correctional care providers and community providers cannot be overemphasized. Transitions of care both in and out of correctional facilities represent vulnerable periods for the individual; ensuring the care plan is known to all providers can help minimize harm.

During the high-risk post-release period, patients face numerous challenges and competing priorities that can prevent engagement in community treatment. There are several interventions that could be implemented to improve treatment adherence and patient outcomes. Discharge planners must have adequate knowledge of patients' treatment and social needs so that they can help address barriers—such as lack of food, housing, employment, social support, or transportation—that might impede treatment adherence or successful attendance of initial appointments. Patients should be involved in the planning process to ensure they are fully informed and engaged in the treatment plan. Patient navigators, sometimes called recovery coaches, could also provide a crucial linkage if they are connected to patients prior to release and helped to bridge the vulnerable time period during reentry. Lastly, all released prisoners with a history of an OUD should leave a correctional facility having received overdose education and with a naloxone rescue kit for use in case of an overdose.

In addition to their treatment needs, patients being released from correctional facilities will face other challenges that may jeopardize efforts at recovery. Intensive case management and wraparound services can address these needs, for example by linkage to health care (including mental health care) and housing programs and by ensuring enrollment in Medicaid, Supplemental Security Income, and food assistance. Successful models of wraparound services and support exist, particularly from the HIV/AIDS treatment sphere, and they have demonstrated that services such as discharge planning, disease management sessions, transportation, adherence assistance, and support by dedicated case managers facilitate retention in care and reduce risk behaviors (Althoff et al., 2013; Nunn et al., 2010; Rich et al., 2001).

References

- Althoff, A. L., Zelenev, A., Meyer, J. P., Fu, J., Brown, S. E., Vagenas, P., ... Altice, F. L. (2013). Correlates of retention in HIV care after release from jail: Results from a multi-site study. *AIDS and Behavior*, *17*(Suppl 2), S156–S170.
- Binswanger, I. A., Stern, M. F., Deyo, R. A., Heagerty, P. J., Cheadle, A., Elmore, J. G., & Koepsell, T. D. (2007). Release from prison—a high risk of death for former inmates. *New England Journal of Medicine*, *356*(2), 157–165.
- Chang, Z., Lichtenstein, P., Larsson, H., & Fazel, S. (2015). Substance use disorders, psychiatric disorders, and mortality after release from prison: A nationwide longitudinal cohort study. *Lancet Psychiatry*, 2(5), 422–430.
- Friedmann, P. D., Hoskinson, R., Gordon, M., Schwartz, R., Kinlock, T., Knight, K., ... Frisman, L. K., for the MAT Working Group of CJ-DATS. (2012). Medication-assisted treatment in criminal justice agencies affiliated with the criminal justice-drug abuse treatment studies (CJ-DATS): Availability, barriers, and intentions. *Substance Abuse*, *33*(1), 9–18.
- Friedmann, P. D., Wilson, D., Knudsen, H. K., Ducharme, L. J., Welsh, W. N., Frisman, L., ... Vocci, F. J. (2015). Effect of an organizational linkage intervention on staff perceptions of medication-assisted treatment and referral intentions in community corrections. *Journal of Substance Abuse Treatment*, 50, 50–58.
- Fu, J. J., Zaller, N. D., Yokell, M. A., Bazazi, A. R., & Rich, J. D. (2013). Forced withdrawal from methadone maintenance therapy in criminal justice settings: A critical treatment barrier in the United States. *Journal of Substance Abuse Treatment*, 44(5), 502–505.
- Hedrich, D., Alves, P., Farrell, M., Stöver, H., Møller, L., & Mayet, S. (2012). The effectiveness of opioid maintenance treatment in prison settings: A systematic review. *Addiction (Abingdon, England)*, 107(3), 501–517.
- Jacob Arriola, K. R., Braithwaite, R. L., Holmes, E., & Fortenberry, R. M. (2007). Post-release case management services and health-seeking behavior among HIV-infected ex-offenders. *Journal of Health Care for the Poor and Underserved, 18*(3), 665–674.
- Lee, J. D., McDonald, R., Grossman, E., McNeely, J., Laka, E., Rotrosen, J., & Gourevitch, M. N. (2015). Opioid treatment at release from jail using extended-release naltrexone: A pilot proof-of-concept randomized effectiveness trial. *Addiction*, 110(6), 1008–1014.
- Magura, S., Lee, J. D., Hershberger, J., Joseph, H., Marsch, L., Shropshire, C., & Rosenblum. A. (2009). Buprenorphine and methadone maintenance in jail and post-release: A randomized clinical trial. *Drug and Alcohol Dependence*, *99*(1–3), 222–230.
- McKenzie, M., Nunn, A., Zaller, N. D., Bazazi, A. R., & Rich, J. D. (2009). Overcoming obstacles to implementing methadone maintenance therapy for prisoners: Implications for policy and practice. *Journal of Opioid Management*, *5*(4), 219–227.

Mumola, C. J. & Karberg, J. C. (2006). *Drug use and dependence, state and federal prisoners, 2004*. Bureau of Justice Statistics, Office of Justice Assistance, U.S. Department of Justice. Retrieved from http://www.bjs.gov/content/pub/pdf/dudsfp04.pdf

National Center on Addiction and Substance Abuse at Columbia University. (2010). *Behind bars II: Substance abuse and America's prison population*. New York, NY: National Center on Addiction and Substance Abuse at Columbia University. Retrieved from http://www.centeronaddiction.org/addiction-research/reports/substance-abuse-prison-system-2010

Nunn, A., Cornwall, A., Fu, J., Bazerman, L., Loewenthal, H., & Beckwith, C. (2010). Linking HIV-positive jail inmates to treatment, care, and social services after release: Results from a qualitative assessment of the COMPASS program. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 87(6), 954–968.

Nunn, A., Zaller, N., Dickman, S., Trimbur, C., Nijhawan, A., & Rich, J. D. (2009). Methadone and buprenorphine prescribing and referral practices in US prison systems: Results from a nationwide survey. *Drug and Alcohol Dependence*, 105(1–2), 83–8.

Rich, J. D., Holmes, L., Salas, C., Macalino, G., Davis, D., Ryczek, J., & Flanigan, T. (2001). Successful linkage of medical care and community services for HIV-positive offenders being released from prison. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 78(2), 279–289.

Rich, J. D., McKenzie, M., Larney, S., Wong, J. B., Tran, L., Clarke, J., ... Zaller, N. (2015). Methadone continuation versus forced withdrawal on incarceration in a combined US prison and jail: A randomised, open-label trial. *Lancet*, 386(9991), 350–359.

Stallwitz, A., & Stöver, H. (2007). The impact of substitution treatment in prisons—a literature review. *International Journal on Drug Policy*, 18(6), 464–474.

World Health Organization. (2007). Health In Prisons. Available online at http://www.euro.who.int/ data/assets/pdf_file/0009/99018/E90174.pdf

Methods of Engaging Family Courts and Child Protective Services Through Opioid Treatment Programs and DATA 2000 Practices

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This section will provide a strategic blueprint for all relevant parties in the opioid treatment and Child Protective Services (CPS) sectors and policy arenas as they work together on the intersection of child maltreatment and opioid and other substance use disorders (SUDs). The blueprint provides an approach for how medication-assisted treatment (MAT) and other SUD treatment providers, CPS, family courts, and interested parties can work together in the coming years in early identification, screening, assessment, treatment, and recovery support services for families affected by opioid and other drug disorders and child maltreatment.

Different Systems, Same Missed Opportunities

Nationally, between 60 and 80 percent of substantiated child abuse and neglect cases involve a parent or guardian abusing substances (Young, Boles, & Otero, 2007). Any seasoned child welfare worker or family court judge will confirm the same or cite higher prevalence estimates and will also note that substance-involved families consume the most resources. Yet there are few, if any, child welfare systems in the country whose identification of substance use as a factor in child maltreatment comes even close to these prevalence estimates. So why is something so prevalent and loaded with such dire physical, emotional, and fiscal consequences so underprioritized?

In 2011, the State of Nebraska proactively undertook an effort to establish SUD prevalence and to identify treatment barriers. The Nebraska Court Improvement Project conducted an in-depth study of 400 randomly selected child welfare cases to identify and establish a number of important Nebraska-specific baselines, including the prevalence of substance-involved families and the time it took to connect parents with SUDs to treatment. This study found that 56 percent of child welfare cases had substance use identified as a problem in the case record and determined that many of these substance use problems were not identified until late in the progression of the case, after much time and many resources were unproductively expended.

A cross-disciplinary team composed of Nebraska's behavioral health, child welfare, state court system, Medicaid, criminal justice, family advocates, and managed care organizations and others worked with representatives from the Substance Abuse and Mental Health Services Administration's (SAMHSA's) National Center on Substance Abuse and Child Welfare (NCSACW) to identify possible treatment access policy and practice barriers that Nebraska subsequently clarified or addressed. Nebraska's cross-disciplinary team is currently developing a best practice protocol to guide future practice with these high-need families.

Other states are encouraged to follow Nebraska's lead. While there was a small cost associated with Nebraska's initiative, the costs and consequences of not identifying such problems *at the earliest possible opportunity* are borne every day in states and vastly exceed this nominal investment. A few such consequences are well known:

- Missed appointments
- Crowded court dockets
- Public health and safety risks
- Compromised parenting for other children in the home
- Greater out-of-home placement rates
- Greater fatalities
- Higher risk of recidivism in both CPS and criminal justice involvement
- Multigenerational impact related to children who end up with developmental delays, other compromised child-wellbeing conditions, or foster care or adoption plans

Failure to identify and treat substance use in women of childbearing age, particularly pregnant women, can include dramatically higher medical costs associated with late or no prenatal care, and substance-exposed infants (SEI), including those with neonatal abstinence syndrome (NAS) from maternal opioid use during pregnancy. This is a very real and growing problem as the proportion of pregnant women reporting any prescription opioid misuse increased substantially from 2 percent (n = 351) in 1992 to 28 percent (n = 6,087) in 2012 (Martin, Longinaker, & Terplan, 2015). The proportion of pregnant women admitted to treatment who reported prescription opioids as the primary substance of misuse similarly increased from 1 percent (n = 124) in 1992 to 19 percent (n = 4,268) in 2012. Between 2000 and 2009, the rate of newborns diagnosed with NAS nearly tripled, and the number of mothers using or dependent on drugs more than quadrupled, while costs associated with treating these infants increased by 35 percent. Medicaid was the primary payer for over 75 percent of these births (National Association of Medicaid Directors, 2014).

Yet in spite of these well-known consequences and high costs to many state health and human service sectors, CPS worker training on how to identify substance use as a child maltreatment factor is often 2 hours or less in length. Also, it does not always address the growing problem of prescription opioid use, the importance of MAT, or the need for collaborative practice with MAT and other SUD treatment providers.

Similar missed opportunities for early identification and intervention occur in the MAT and other SUD treatment system as well. Child maltreatment prevalence has proven a bit harder to establish. A cross-state analysis of the Treatment Outcomes and Performance Pilot Studies (TOPPS-II) looking at data from 16 States found that 58.5 percent of persons admitted to treatment had a child younger than age 18 (Ahmed, 2006). The Hser et al. (2003) study found that 27.1 percent of parents in SUD treatment had one or more children removed from their custody and that 36.6 percent of those parents with a child who was removed had their parental rights terminated. Among parents with a child removed by CPS, 29 percent in outpatient programs, 53 percent in residential programs, and 80 percent in OTPs had their parental rights terminated.

In SUD assessment and intake, an individual's parenting status and child welfare referral source are captured on forms but infrequently addressed as part of treatment. Traditionally, SUD treatment programs view the substance user as the "primary" or "identified" patient, and attention paid to the impacts of parental opioid or other SUD on minor children is scant or indirect at best. This happens despite the well-established research literature and practitioner

firsthand knowledge that, without therapeutic or preventive intervention, these children may become tomorrow's patients. The reasons for this narrow approach are numerous and include reimbursement structure limitations, productivity requirements, regulatory standards that do not accommodate a family-centered approach, and other competing priorities. The approach reflects a workforce that lacks sufficient education, training, and clinical supervision to effectively address family issues, including prevention and identification of child maltreatment and therapeutic responses.

While not all parents who use opioids, alcohol, or other drugs mistreat their children, such use can adversely impact attachment, relationships, and family dynamics and significantly affect the likelihood the children will have traumatic experiences in childhood. While most MAT and other SUD treatment provider staff are intuitively aware that the minor children of their treatment clients may have experienced various forms and levels of trauma as they unwittingly accompanied their parents through their addiction journey, not enough is done to stabilize and heal these families and to prevent the need for CPS involvement. These children are not typically given continued support after their parent's treatment to resolve feelings and adjust to new roles, rules, and behaviors, as well as new fears and anxieties. Additionally, few MAT or SUD treatment programs are aware of, or connect their relevant clients to, the preventive child welfare services and supports that could potentially prevent CPS involvement.

An additional complication is that most MAT and other SUD practitioners providing services to child welfare involved parents are unaware of the Adoption and Safe Families Act (ASFA), which requires states to move to terminate parental rights of children who have been in foster

care for 15 out of the last 22 months. Failure of the child welfare and SUD treatment system to work together to identify, assess, and connect to parents who have children in out-of-home placement, and stabilize them in treatment, results in fiscally and emotionally costly consequences, including termination of parental rights. The consequences of waiting lists, bureaucratic barriers, missed appointments, and waiting for clients to move out of a "precontemplation" stage can be a heavy burden for any parent to shoulder, but for parents for whom the ASFA clock ticks, permanent loss of their children can result.

Cross-training is needed for all relevant parties in the opioid treatment and CPS sectors on how to timely identify and respond to parents with opioid use and other SUDs, and on the importance of MAT. New Jersey and Pennsylvania are in various stages of expanding and improving SUD training.

There are significant knowledge gaps in each system that must be addressed before effective

"Screening for substance use disorder should always be part of safety assessment conducted in response to a report of abuse or neglect. If screening indicates SUD, a referral to formal SUD services assessment must be made."

(Michigan Substance Abuse/Child Welfare State Team, 2009)

identification and screening practices can be realized. Cross-training is needed for all relevant parties in the opioid treatment and CPS sectors on how to timely identify and respond to parents with opioid use and other SUDs, and on the importance of MAT. States like New Jersey and Pennsylvania are in various stages of expanding and improving such training. New Jersey worked with SAMHSA's NCSACW and the Institute for Families (IFF) at the Rutgers School of Social Work to significantly expand SUD training for its child welfare

workers. Several Pennsylvania counties are also currently exploring expanded cross-training opportunities and methods.

Cross-disciplinary staff training is just one way to increase the identification of parents affected by opioid disorders and other SUDs and child maltreatment risk or incidents. Historically, the SUD system and child welfare system screen for identified problems in their respective fields in silo fashion: child welfare screens for abuse and neglect, SUD systems screen for substance use, and courts determine statutory compliance. In 2008, Michigan realized the need for its child welfare system to screen families for potential SUD and refer them for assessment and treatment when appropriate. It determined that SUD providers should assess the safety status of clients' children and collaborate in other ways with their child welfare system counterparts. Michigan developed a protocol based on the Screening and Assessment for Family Engagement, Retention, and Recovery (SAFERR) model described below.

Screening and Assessment for Family Engagement, Retention, and Recovery (SAFERR) (2006). SAFERR is a collaborative model to help child welfare, substance abuse treatment, and family court professionals make informed decisions when determining outcomes for children and families affected by substance use disorders. The guide provides strategies to help improve the collaborative capacities across systems. Available at https://ncsacw.samhsa.gov/files/SAFE RR.pdf

SAFERR is a collaborative model to help child welfare, SUD treatment, and family court professionals make better informed decisions when determining outcomes for children and families affected by SUDs. It is based on the premise that when parents misuse substances and maltreat their children, the only way to make sound decisions is to draw from the talents and resources of at least three systems: child welfare, SUD treatment, and the courts. Although substance use alone is not the sole determinant of risk to children, the SAFERR model holds that because so many families involved with child welfare have these problems, there is a need for child welfare policies that call for initial and ongoing screening and assessment of possible SUDs with an

assumption that those disorders are likely to exist. (That is, the practice should be to "rule out" SUDs.) Similarly, this correlation suggests a need for alcohol and drug policies that call for initial and ongoing assessment of child safety and risk of child maltreatment within families (Young, Nakashian, Yeh, & Amatetti, 2006). While not specific to the growing problem of opioid use and the need for MAT, the SAFERR model is inclusive of both and contains a number of helpful screening tools, communication protocols and more for improving cross-system collaboration.

Myths, Misinformation, Misperceptions, and Missed Placements?

Misperceptions regarding the benefits of MAT (including during pregnancy), ongoing prejudice, and actions by court or CPS agency personnel that counter evidence-based treatment strategies create a toxic and potentially deadly treatment and recovery environment. Research documents that treatment of OUD *without* MAT results in relapse rates over 75 percent. Despite well-published studies of the effectiveness of medications like methadone and buprenorphine for opioid addiction and naltrexone for opioid or alcohol addiction, parents involved with child welfare services rarely receive them. Choi and Ryan (2006), for example, found that only 24 percent of heroin users in a child welfare sample had been referred for methadone treatment, despite evidence of methadone's effectiveness in treating heroin addiction.

Despite our knowledge that long-term opioid and other drug use profoundly alters the brain, and that for most affected individuals MAT is the *only* treatment that can reduce their metabolic drug hunger, opioid dependent parents are often sent to a family court or treatment program without an MAT option, or worse yet, to one that condemns medical assistance as not "true recovery" or emphasizes willpower over chemistry. Set up to fail, too many opioid dependent parents receive this erroneous treatment placement and bear the inevitable consequences of its failure, a price which can include the loss of their children, or even their lives. We can and must do better.

In Pinellas County, Florida, Operation PAR and its partners figured out a solution to this problem by establishing a community-based program model that includes education, a safe environment, medically supervised MAT, and ongoing social and professional supports providing a promising path to improve SUD treatment effectiveness. The Motivating New Moms (MnM) program addresses system issues regarding women seeking MAT and the forced choice they make between treatment and child reunification by shifting the orientation from ongoing punishment to support for these women in recovery. The program maintains relationships with Pinellas Hospital neonatal intensive care units (NICUs) and Federally Qualified Health Centers (FQHCs), and it provides parenting education and support groups for these women and assists participants to engage in treatment. Lastly, the program provides case management services to appropriate women involved in referral or supervision through the child welfare system (Vargo, Griffin, & Gamache, 2012). A similar perinatal addictions program is provided in New Jersey, involving a JSAS HealthCare, Inc. (Jersey Shore Addiction Services) MAT program.

Another example is the Children and Recovering Mothers (CHARM) Collaborative in Burlington, Vermont, a multidisciplinary group of agencies serving women with opioid addiction and their families during pregnancy and through infancy. The CHARM Collaborative is focused on meeting the needs of pregnant and postpartum women and babies if there is a history of opioid use. It emerged in the late 1990s, in response to the increasing need for MAT resources for opioid dependent pregnant women. Today, the CHARM Collaborative includes 11 organizations that collectively provide comprehensive care coordination for pregnant women with opiate addiction and consultation for child welfare, medical, and addiction professionals across Vermont (*Children and Recovering Mothers*, 2014).

Ohio's opioid epidemic is of such grave concern that during his first 100 days in office, Governor Kasich created a Cabinet-level Opiate Task Force and new policies, investments and initiatives have begun. One such effort includes an MAT pilot providing \$5 million to selected locations that coordinate with providers and local drug courts including Family Dependency Treatment Courts (FDTC). Moreover, the Governor's Cabinet Opiate Action Team has created a small pilot with streamlined Medicaid preauthorization procedures, which could be replicated for Medicaid-eligible parents in the child welfare system (*Child Welfare Opiate Engagement*, 2014).

But even the best evidence-based approaches cannot work in a vacuum. As long as MAT and other SUD treatment systems and child welfare systems avoid formal collaboration, parents dually affected by opioid and other SUD and child maltreatment will continue to suffer the consequences, as will their children. CPS and court workers' knowledge of MAT rarely includes

firsthand visits to, or collaboration with, MAT providers, and it is too often influenced by myths and misinformation stemming from second- and thirdhand accounts of clients being overmedicated and undermonitored or simultaneously using other substances. That is not to say that these circumstances do not occur. As is the case in *all* public and private sectors, some MAT programs are better than others. The frequency of MAT, other SUD providers, and child welfare staff actually meeting to address myths and misinformation or resolve real complaints is minimal at best, and nonexistent in many states and communities. This problem is exacerbated in states that do not include MAT in their publicly-funded system of care, with its associated quality improvement mechanisms. In itself, that sends a message and begs the question: if not evidence-based, then what?

While the need to increase early identification of parents affected by substance use and child maltreatment problems and connect them to effective treatment and recovery support is not a new problem, it has taken on more urgency as the number of parents using heroin, prescription pain medications, and other opioids has so drastically risen. Community stakeholders that have previously not worked together are now feeling collaboration as a mandate, rather than an option. Cross-system collaboration among CPS, MAT and other SUD treatment providers, and the courts shows promise in addressing the many needs of child welfare-involved families experiencing parental SUDs. Given what these families have at stake, they deserve nothing less.

References

Ahmed, K. (2006). Data analysis of the interstate Treatment Outcomes and Performance Pilot Project (TOPPS-II) data set from the 16 TOPPS-II primary data states. These data were analyzed by Dr. Kazi Ahmed of Johnson, Bassin & Shaw under contract to the Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, on January 29, 2006. Unpublished data.

The Children and Recovering Mothers (CHARM) Collaborative in Burlington, Vermont: A case study. (2014). Retrieved from

http://county.milwaukee.gov/ImageLibrary/Groups/cntyHHS/BHD/CARS/Well-Baby/CHARM_CaseStudy.pdf

Child Welfare Opiate Engagement Project. (2014). Retrieved from http://www.pcsao.org/perch/resources/downloads/cw-opiate-white-paper-final-9-18-14.pdf

Choi, S., & Ryan, J. P. (2006). Completing substance abuse treatment in child welfare: The role of co-occurring conditions and drug of choice. *Child Maltreatment*, 11(4), 313–325.

Hser, Y. I., Evans, E. Teruya, C., Ettner, S., Hardy, M., Urada, D., ... Anglin, D. (2003). Chapter IX. Alcohol and other drug abuse treatment outcomes. The California Treatment Outcome Project (CalTOP) final report (chap. IX), pp. 15–16. Retrieved from http://www.uclaisap.org/caltop/FinalReport/Chapter%20IX%20Treatment%20Outcomes.pdf

Martin, C. E., Longinaker, N., & Terplan, M. (2015). Recent trends in treatment admissions for prescription opioid abuse during pregnancy. *Journal of Substance Abuse Treatment*, 48(1), 37–42.

Michigan Substance Abuse/Child Welfare State Team. (2009). *Michigan substance abuse/child welfare protocol for screening and assessment for family engagement, retention and recovery (SAFERR)*. Retrieved from

 $\underline{http://courts.mi.gov/Administration/SCAO/Resources/Documents/bestpractice/SAFERR-Protocol.pdf}$

National Association of Medicaid Directors. (2014). State Medicaid interventions for preventing prescription drug abuse and overdose: A report for the National Association of Medicaid Directors. Retrieved from http://medicaiddirectors.org/publications/state-medicaid-interventions-for-preventing-prescription-drug-abuse-and-overdose/

Vargo, M.A., Griffin, J., & Gamache, P. (2012). Neonatal abstinence syndrome: One community's efforts to reverse the trend. *Journal of Global Drug Policy and Practice*, 6(4). Retrieved from

 $\frac{\text{http://www.globaldrugpolicy.org/Issues/Vol\%206\%20Issue\%204/Neonatal\%20Abstinence\%20S}{\text{yndrome.pdf}}$

Young, N. K., Boles, S. M., & Otero, C. (2007). Parental substance use disorders and child maltreatment: Overlaps, gaps, and maltreatment. *Child Maltreatment*, *12*(2), 137–149.

Young, N. K., Nakashian, M., Yeh, S., & Amatetti, S. (2006). *Screening and Assessment for Family Engagement, Retention, and Recovery (SAFERR)*. Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Retrieved from https://ncsacw.samhsa.gov/files/SAFERR.pdf